SAVE THE CHILDREN

NEPAL FIELD OFFICE

Siraha District

Child Survival 7

Midterm Evaluation

Agency for International Development

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Save the Children/US
Child Survival 7
Siraha District, Nepal
Midterm Evaluation

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Selected Acronyms

AHW	Auxiliary Health Worker
AIDS	Acquired Immune Deficiency Syndrome
ANM	Auxiliary Nurse Midwife
ARI	Acute Respiratory Infection
CDD	Control of Diarrheal Diseases
CHV	Community Health Volunteer
CS	Child Survival
DPHO	District Public Health Officer
DPT	Diptheria, Pertussis, Tetanus
EPI	Expanded Program on Immunization
FP	Family Planning
FPAN	Family Planning Association of Nepal
HIS	Health Information System
HP	Health Post
MCH	Maternal and Child Health
MCHW	Maternal and Child Health Worker
MOH	Ministry of Health
NFE	Nonformal Education
NGO	Nongovernmental Organization
ORS/T	Oral Rehydration Solution/Therapy
PEM	Protein Energy Malnutrition
SC/US	Save the Children/United States
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
USAID	United States Agency for International Development
VDC	Village Development Committee
VHW	Village Health Worker

Executive Summary

The midterm evaluation of the Save the Children (SC/US) Nepal Child Survival (CS) VII project was conducted from 25 March to 7 April, 1993. The assessment team was composed of Dr. B. B. Karki, Miss Rukmini Charan Shrestha, Dr. Katherine Kaye, Mrs. Chanda Rai (from the SC/Kathmandu office) and Ms. Jean Baker (team leader). The team used both qualitative and quantitative methodologies in carrying out the evaluation. The former included a series of interviews with Ministry of Health and SC/US staff, both in Kathmandu and Siraha District, the location of the project. Interviews were also conducted with the Health Post-in-Charge, Village Health Workers (VHWs), Community Health Volunteers (CHVs), women's groups, Traditional Birth Attendants (TBAs), and Management Committees. Site visits were made to Health Posts, Outreach Clinics, EPI Sites, DPHO, Hospitals, and Nonformal Education classes. Quantitative methodology included review and comparison of household enrollment, clinic registers, service statistics, and VHW registers.

The project is based in an extremely poor area of Siraha District, a terai section of Nepal, with a high percentage of the women and children considered to be at risk, and therefore targets for child survival interventions. This project incorporated two major strategies in its implementation: (1) to strengthen the government's health service delivery system in the project area; and, (2) to create demand at the community level for health services. The project has also attempted to improve access to health services.

It has made considerable progress is conducting training, establishing community contacts, and developing the coordination and collaboration with government organizations, necessary to reach the objectvies set. Although much has been accomplished already, there is more to do in the area of improving service delivery. An overriding constraint for the project however, in meeting numerical targets set for service delivery, is the fact that the Child Survival project is <u>not</u> the service provider, and must rely on government workers.

The midterm assessment focused on progress in strengthening and implementation of systems to support service delivery. The evaluation team was able to evaluate progress in project implementation in relation to the implementation plan, assess strategies, and analyze the service statistics and records which exist from government sources. Actual measurement of numerical progress toward quantitative targets (impact) was considered impractical if not impossible. Impact analysis is advised after three years.

The SC/US role in supervision and monitoring, and in

providing technical assistance, to government counterparts has been a very valuable one, which should be strongly emphasized throughout the remainder of the project. The strategy of developing a CS project in the context of overall community development has also proved to be essential. The need for improving community knowledge and awareness of priority health issues, to instill "ownership" and demand for health services, is a key finding, particularly with regard to sustainability.

Recommendations are numerous, and include the need for continued focus on improving HIS recording and reporting, particularly at the VHW level; better case management of ARI and diarrhea at clinic sites; additional support for drug logistics to increase availability, particularly of Jeevan Jal (ORS) and family planning commodities; increased focus on provision of family planning services to meet high unmet demand; and, continued training of VHWs, CHVs and TBAs.

I. Project Background and Description

The project is located in Siraha District (with a population of approximately 444,627), one of the seven districts of the Sagarmatha Zone in the Eastern Development Region of Nepal. Siraha District is a rural, subtropical terai (plains) area covering 1,188 square kilometres, which borders India to the south. The population is of diverse ethnic and socioeconomic status; about 85 percent is Maithili speaking.

Save the Children/US began rural development and reconstruction activities in Siraha District following the 1988 earthquake in the area. In 1989, a community development office was established in Golbazar town, for six panchayats (now Village Development Committees or VDCs) of Ilakas 4 and 5. Primary health care and child survival were identified as priority needs of these communities. In 1991, SC/US extended its coverage to all 24 VDCs of Ilakas 4 and 5, in response to a request from the government to work with the Ministry of Health's service delivery system at the Ilaka level. The total population of these Ilakas is estimated to be 103,542 in 19,199 households. According to the project's Detailed Implementation Plan (DIP), in 1992, there were an estimated 3,170 children 0-11 months of age; 2,831 children 12-34 months; and 21,763 women aged 15-45 years of age.

The DIP states the overall aim of the project is **to reduce infant and young child mortality and morbidity through strengthening of Ministry of Health service delivery and creating a sustained community demand for health services. It will emphasize the role of Community Health Volunteers (CHVs), Traditional Birth Attendants (TBAs), and mothers' groups in creating improved knowledge and practice of protective health behaviors at the household level.** The project objectives were set in 1991 and revised in May 1992.

The CS project has conducted various surveys to collect baseline data in the catchment area. A 100 percent Family Enrollment Survey was conducted in Siraha in 1992 to document the health knowledge and practices of mothers with children less than two years of age, in the 24 VDCs. This information is provided below, along with the findings of the CS VII Sample Survey (the AID CS questionnaire), and from a Jeevan Jal Preparation Survey.

A. 100% Family Enrollment Survey

The survey team visited all households in the target area and collected demographic, health and literacy information. The survey was conducted between December 1991 - January 1992. The total population was found to be 103,542, with 21,763 women aged 15 - 45 years, and 14,191 children less than five years of age.

1. Household Findings:

* Number of households	19,199	
* HHs with latrine	181	0.9%
* HHs with improved chulo	15	<0.1%
* HH with clean drinking water (dhara or hand pump)	8,514	44.3%

2. Literacy Findings:

* Women 15 - 45 literate	3,114	14.3%
* Men 15-45 literate	11,157	47.7%

3. Immunizations Findings (by verbal history):

* Children 1-3 years complete	53.3%
* Women 15-45 with 2+ TT	50.8%

4. Delivery Attendant:

* Deliveries in past 5 years	15,852	
* Trained attendant		10.2%
Trained TBA	7.6%	
Health worker .	1.5%	
Health post/or hospital	1.1%	
* Untrained attendant		89.8%
Untrained TBA	57.7%	
Family/relative	25.1%	
Self	7.0%	

5. Family Planning:

* Permanent and temporary prevalence		14.84%
* Sterilization		14.5%
Female	93.5%	
Male	6.5%	
* Temporary		0.34%
Pills	0.08%	
Condoms	0.06%	
Depo	0.2%	

6. Diseases (currently receiving treatment):

* TB		0.5%
* Malaria	14 cases	
* Leprosy	53 Cases	
* Kalazar	79 Cases	

B. Child Survival VII Baseline Survey

The survey was conducted in February 1992, as required by USAID at start and end of the project. A standardized questionnaire about knowledge and practice of maternal and child health (child survival) which follows WHO methodology for 30 cluster sample survey. There was random selection of 30 villages and 8 households in each village. A total of 240 mothers with a child less than 2 years (0-23 months) were interviewed.

1. General Findings:

92.1%	mothers are illiterate
89.5%	mothers do not do income generating activities
40.2%	mothers leave baby in care of older children
61.9%	mothers believe cough (ARI) is most serious child health problem in community
90%	mothers do not have growth monitoring card

2. Diarrhea Findings:

33.9%	mothers report diarrhea in past two weeks for <2 child (81 of 239 mothers reported)
75.4%	of 81 mothers reporting diarrhea did **NOT** use JJ/NCP (16% used JJ/8.6% NCP = 24.6% used)
43.2%	mothers reporting diarrhea gave LESS breastmilk during diarrhea
49.4%	mothers gave LESS solid food
13.5%	mothers STOPPED giving food
33.3%	mothers gave "medicines"
No	mothers sought advice from HP/HOSP
59.4%	of 239 mothers do not know a cause of diarrhea

3. Immunization (12-23 months - must show EPI/GM card)

30.7%	with card		
15.7%	DPT 3	DPT drop out	45.4%
14.9%	Polio 3	Polio drop out	46.8%
28.1%	BCG		
13.2%	Measles		
10.5%	Complete coverage (documented on a card)		
3	of 239 mothers had antenatal card		
17.6%	mothers had card showing 2 or more TT		

4. Family Planning Findings:

10.7% eligible couples using FP:
* 9.5% sterilization/permanent
* 1.2% depo/temporary

5. Antenatal Care Findings:

9.6% mothers reported having antenatal care during last pregnancy
68.6% mothers ate LESS during pregnancy

C. Jeevan Jal Preparation Study

The study was conducted using a convenience 12 cluster sample survey. 220 households with a child less than two years of age were interviewed. The survey was carried out in December 1992, to find out knowledge and ability to make and give Jeevan Jal correctly.

1. Findings:

* Can caretaker or other family member make JJ?
  Yes = 135 of 220 HHs = 61.4%
* Respondent correctly made JJ?
  16/135 = 11.9% (HHs who said they could)
  16/220 = 7.3% (all 220 HHs)
* Literacy status + correct preparation:
  Literate 12 correct/50 literates = 24%
  Illiterate 4 correct/85 illiterates = 4.7%
* Know how to correctly give JJ:
  37/135 = 27.4%
  37/220 = 16.8%
* <2 years child with diarrhea in past 2 weeks?
  Yes = 50/220 =22.7%
* Did you give JJ?
  Yes = 7/50 = 14%
* Is JJ available when needed?
  Yes = 74.5%
* <2 years child with pneumonia in past 2 weeks?
  Yes = 59/220 = 26.8%

II. The Evaluation Team, Schedule, Methodology and Field Visits

A. Objectives of the Evaluation

USAID requires a mid-term evaluation for all Child Survival VII three-year projects. The Save the Children Nepal Child Survival Project, based in Siraha District, began in October 1991, so the current evaluation is exactly midway in the project implementation. Among the main objectives for the evaluation, recommended by AID are:

1. Provide project staff with an external prespective on progress since the start of the project, and potential for reaching stated objectives.

2. Assess whether the project is being carried out in a competent manner, and priorities clearly defined.

3. Help the PVO assess lessons learned, and identify new strategies or methodologies applicable to other CS projects.

The midterm assessment focused on the project's progress in strengthening and implementation of systems to support service delivery. The evaluation team was able to evaluate progress in project implementation in relation to the implementation plan, assess strategies, and analyze the service statistics and records which exist from government sources. Actual measurement of numerical progress toward quantitative targets (impact) was considered impractical if not impossible. In discussions with USAID/Nepal, the Mission made clear its belief it was too early to attempt assessment of impact after only 18 months of implementation. Impact analysis is advised after three years and suggested impact indicators, comparing the SC/US and non SC/US areas, are listed in Appendix 1.

B. The Evaluation Team

The evaluation team was composed of Dr. B. B. Karki, Miss Rukmini Charan Shrestha, Dr. Katherine Kaye, Mrs. Chanda Rai (from the Save the Children, Kathmandu office) and Ms. Jean Baker (team leader). The team represented a range of education and experience, in both the government and NGO sectors, including medicine, nursing, epidemiology, management, and public health. Save the Children project staff accompanied the team on visits in Siraha District. Ms. Molly Gingerich, Deputy Chief of the Health and Population Office, USAID/Nepal also accompanied the team on most of the site visits in Siraha.

C. Evaluation Schedule/Field Visits

The evaluation was begun on Thursday, March 25th, 1993 and completed with a debriefing in Kathmandu on Wednesday, April 7th. The team spent the first two days conducting interviews with project staff in the headquarters office in Kathmandu, in meetings with the Ministry of Health, and a USAID/Nepal official. The team spent six days in the field in Siraha District. The schedule for the evaluation team is provided in Appendix 2.

D. Evaluation Methodology

The methodology for the evaluation included several approaches, both qualitative and quantitative. Interviews were held with Ministry of Health and the donor representative in Kathmandu, and an extensive series of interviews was held with officials and clients in the field. Guideline sets of questions for the interviews were developed in advance to ensure consistency in approach. Those questionnaires are provided in Appendices 3 and 4. Meetings were conducted with SC/US staff both in Kathmandu and in the field. Site visits were made to the following: Siraha District Hospital, Lahan Hospital, Lahan Eye Hospital, Golbazar, Nainpur and Sukhipur Health Posts, several Outreach Clinics, three EPI sites, and the DPHO's office in Siraha. Additionally, numerous community level visits were made to VHWs, CHVs, TBAs, nonformal education classes, and other community groups. Finally, a brief review of health records was conducted, primarily of the VHW registers. A comparison was made between government records and SC/US records, primarily the Household Enrollment Forms.

III. Main Accomplishments of the CS Project

This CS project adopted two major strategies to guide its implementation: (1) to strengthen the government's health service delivery system in the project area; and, (2) to create demand at the community level for health services. At the same time, the project has also attempted to improve access to health services. To achieve these aims, the project developed a program of training and logistics support.

The project focused on community level activities, to improve awareness of health issues at the household level. As such, one of the first activities of the project was to conduct a Household Enrollment Survey, using a questionnaire developed to assess current knowledge and practice of mothers regarding child survival issues. The project completed 100 percent household enrollment, providing a baseline of quantitative information on the community. The household enrollment was followed by a baseline survey, using the standard USAID Child Survival questionnaire to assess information on the community.

The stress on the community level was carried through with the decision to emphasize village level workers, such as the CHVs, mother's groups, and TBAs. However, this was done with the knowledge that many CHVs are currently inactive and their low literacy levels are a constraint. The connection of health to literacy, particularly for women, in this area became a priority and the project has focused much attention and effort on this linkage. The project does not have the capacity or manpower to do actual case identification and management at the household level, so facilitated outreach services (such as the Outreach Clinics and EPI sites), which are close to the community. The development of Health Post and Outreach Clinic Management Committees was intended to build interest in health services and activities and stimulate community demand for services. These Committees were given an orientation into the project, to begin to build community pressure to improve and sustain health services.

To improve access to services, the project urged the MOH to close the nearby Outreach Clinic sites and move them to more remote areas. Because of these and other project initiatives, the MOH staff began to perceive that because of the Child Survival project they were being asked to do more and "harder" work (such as travelling further distances). However, SC/US has attempted to ameliorate this situation by provding bicycles to enable MOH staff to travel more easily to outreach sites.

The project has conducted various training activities, including refresher training for local TBAs, training in EPI and diarrhea for CHVs and women's groups, and information systems training for the district and Health Post staff. In November

1992, the project conducted focus groups with mothers to collect qualitative information about EPI, ARI and diarrhea.

It was difficult to assess in the short time of the evaluation, the effect of the Project's training. However, it is clear that retraining and upgrading of the technical knowledge and skills of the MOH staff was a prerequisite to improved and expanded service delivery. MOH staff reported that they found the training informative and useful and the DPHO acknowledged the utility of these efforts.

At the time of the midterm evaluation, the CS project had been running for 18 months (October 1991 - March 1993). The Project has held the following training activities since its inception:

Table 1. Child Survival Project Training Activities

Type of Training	Type of Participants	Number of Participants
HIS Orientation	DPHO, HP staff, VHWs CHVs	245
Family Enrollment	Supervisors, SC staff, interviewers	95
Baseline Survey	DPHO, Survey Supervisors Interviewers, SCF staff	17
Diarrhea & Sanitation	CHVs, TBAs, Women's group NFE classes	401
EPI	CHVs, TBAs, Women's group NFE classes	352
Feeding Practices	CHVs, Women's groups	296
ARI	CHVs	204
Maternal Care	CHVs	204
Family Planning	CHVs, Women's groups	287
STDs	HP staff	10
Vitamin A	HP staff, VHWs	34
Project Orientation	Project Staff	15

The project has also assisted government staff to extend service delivery in the project area. Following is the number of clinics scheduled and conducted in the past six months (October 1992 - March 1993).

Table 2. Child Survival Project Assisted Health Clinics

	HP MCH Clinic	Outreach Clinic	EPI Clinic
Scheduled	24	54	720
Held	20	35	432*

* It is estimated by SC/US project staff that approximately 60 percent of the scheduled clinics are held, although this is an estimate. VHWs are responsible for holding the EPI clinics, so if they do not appear, the clinic is not held.

Since the project is based on collaborative efforts with the government, coordination is an essential aspect of project implementation. In the past six months (October 1992 - March 1993), the following coordination meetings have been held with the DPHO and community-based Management Committees. Some of these meetings, such as those with the DPHO, are dependenton his availability.

Table 3. Child Survival Project Coordination Meetings

	Outreach Comm.	Health Post Comm.	DPHO
Scheduled	42	6	3
Held	16	4	1

SC/US has just recently signed a formal agreement with the Ministry of Health, delineating the activities of the SC/US health program, and by extension the CS project, and its relationship to Ministry staff. This formal agreement should further improve relations with government.

IV. Project Effectiveness

The project has made considerable progress in planning and conducting training, establishing community contacts, and developing the coordination and collaboration with government necessary to reach the objectives set. The areas in which the project appears to have been most effective are:

- identification of community health priorities;
- training for MOH staff;
- development and support of Health Post and Outreach Clinic Management Committees;
- development of a close linkage between NFE classes and community health education, particularly for women;
- improved community access to services through establishment of Outreach Clinics.

Although much has already been done, there is more to do during the next 18 months of project implementation in the areas of extending and improving service delivery. However, the overriding constraint for the project, in meeting numerical targets set for service delivery, is the fact that the SC/US project is <u>not</u> the service provider. The regular Ministry of Health staff implement services, with all the constraints known to affect government efforts in Nepal (such as the almost constant turnover of MOH staff - there have been three different men as Health Post-in-Charge in Golbazar since the project began 18 months ago). Still, this approach was adopted because it was considered to be more sustainable than creation of a separate NGO service delivery network.

The paid VHWs and the unpaid CHVs are expected to do identification and follow up of high risk clients at the village level through household visits, but the extent of this coverage is unknown. The need to motivate the paid VHWs and the unpaid CHVs to become more active in the community is an issue that is not unique to Siraha District. The project is encouraged to proceed quickly with its exploration of options to encourage more activity on the part of community workers. A review of the process of identification and selection of CHVs in the community is a good place to start, focusing on women who are truly interested in the position. Exploration of nonfinancial incentives (e.g., additional training, badges for achievement, home sign boards advertising services available) deserves more attention.

As paid MOH staff, VHWs come under the supervisory system of the government. Effective supervision is necessary to improve

performance, but the project should try other incentives as well (e.g., recognition of achievement, "VHW of the Month").

It is difficult to estimate how much total coverage has been achieved in the project area, based on MOH service statistics. Record keeping is not a strength of the government system and Siraha is no exception. The project could collect actual coverage if it were to focus on well kept and current VHW registers, which contain most of the pertinent information. (Or if it developed its own independent but parallel reporting system, which is neither practical nor advisable.) Ideally, the HIS should be seen as a tool to reach the entire community as well as a way to identify those at highest risk, such as mothers and children who are imcompletely immunized. The VHW registers should contain maternal age, parity, current pregnancy status, children's and women's EPI status, deaths. Even with that, indicators would not be available for ARI, diarrhea, or protein-energy malnutrition. It is MOH policy that Vitamin A capsule distribution is not recorded by name on any form, but just total numbers (tallies) will be counted.

There is no question that the project reaches many high risk mothers and children. In fact, almost all the mothers and children in the project area can be considered high risk, and should consequently be targeted for health education messages. Data from the baseline survey (from mothers with children less than two years of age) support this premise. For example, only 10 percent of mothers were attended at the last delivery by a trained health worker; 9 percent of mothers reported any antenatal care during the last pregnancy; 11 percent of children aged 12-23 months had complete immunization coverage; 60 percent of children are malnourished; 11 percent of eligible couples use family planning. An estimated 35-40 percent of families in the target area are landless or have marginal land holdings, and the area is food deprived. (Just before the evaluation began a hailstorm hit the area, destroying an estimated 75 percent of the local wheat crop, as well as mango and banana plants. The evidence of the destruction was visible during the site visits in Siraha). Scarcity of potable drinking water and water for irrigation are major problems.

V. Assessment of Competence in Carrying Out Project

A. Assessment of Design

From the government of Nepal's perspective, it is preferable for a nongovernmental organization to provide coverage for an entire district. If a project covers a whole district, findings, strategies, and service options have more relevance than when a project is limited to a smaller catchment area. Nevertheless, there is recognition that this is not always possible.

SC/US is currently working in three districts (Siraha Gorkha, Nuwakot), in three separate regions of Nepal. This has been done to test the model of integrated community development in three quite different environments.

This CS VII project initially limited its target area to two of the total of nine Ilakas (numbers 4 and 5) of Siraha District. (The Siraha integrated Save the Children project area has in fact expanded, from the initial coverage area of six VDCs in 1990, to 24 in 1991 when the CS project began.) The decision was taken to limit the project impact area to just two Ilakas during the design phase, primarily due to staffing and budget constraints. Another major consideration in limiting the project coverage area to two Ilakas was the strategy to focus on Child Survival and health services in the overall context of integrated community development. This approach is a hallmark of the Save the Children philosophy (and was successfully implemented in the Gorkha CS III Project in Nepal). Finally, matching funds, available from Save the Children, have not increased in recent years, making expansion of the project area and therefore the budget, problematic. Project services have not expanded geographically during the first 18 months of implementation, but there is careful consideration of the feasibility of doing so in future years.

The project management has adopted a practical and reasonable approach to health service delivery in Nepal, by deciding to work through and with the government system, instead of creating a parallel service delivery system. At times this strategy creates frustration and delays achievement of the objectives set. However, this approach is in keeping with the government's policy for NGOs and the attempt to make all health service delivery sustainable (defined as maintaining the government system).

This interface of government and NGO strengthens the government capacity for service delivery, when the NGO inputs are additive. This is particularly true when the NGO support focuses on the weakest areas of government service delivery. Field work however must be closely coordinated with program strategies and policies at the national level. The NGO's technical expertise

can provide a valuable contribution to policy formation at the central level (e.g., program strategies for dealing with STDs and AIDS). This linkage can provide a model for other NGOs, working in the health sector.

Another aspect of the SC/US approach is the tactic of focusing on "total human development" and designing a project that attempts to address a broad range of identified community needs (e.g., water, irrigation, food production, income generation, literacy).

The SC/US approach has been very flexible in testing alternative ways to implement its program. It has provided bicycles to health workers to assess whether transport is really a constraint to expanding government outreach service delivery, as has been claimed. Because the project focused on the village level workers (CHVs and VHWs), whose efforts are essential to successful implementation, the project may want to consider the use of nonfinancial incentives to stimulate performance. For example, the project might give badges to CHVs with high village EPI coverage, or a sign board at home which advertises the services. Although these kinds of incentives may not be sustainable in the absence of NGO inputs, hopefully they lead to improved performance of village level health workers, and thus increase demand for health services. This increased demand may by itself lead to sustainable change.

In summary, there are several "special" features of the SC/US project design that the evalution team considered notable:

Special Features of the Project

- The project was developed in an integrated community development context.
- Local health management committees have been established and asked to take on responsibility.
- A drug support fund (to extend government supplies) was established.
- Outreach Clinics (providing integrated MCH services) were established.
- The household enrollment survey provided data and feedback at the community level, the day following the survey.
- The project (SC/US) has provided special support for

expensive kala-azar treatment and for snake bites.

- Focus groups were used to identify community perceptions about ARI, diarrhea, and immunization.
- The "Poorest of the Poor" fund subsidizes drugs by 50 percent.
- Local drama groups promote health messages.
- Bicycles were provided to health staff to improve transportation and increase community level services (e.g., EPI sites).
- Nonformal education is an integral part of the strategy to improve health information and demand for service.
- The lessons learned from the Gorkha CS project were incorporated into the design of the Siraha project.

B. Assessment of Management and Use of Data

Collection of routine service statistics data is outside the control of the CS project, as it is a function of the MOH staff. Use of the data is also in the realm of the government's responsibility. However the project has made a serious effort to improve the quality of data collected, and its analysis and use. This will continue to be a feature of the project throughout the coming months.

In order to avoid having to consider the Health Information System (HIS) as consisting of all 17 of the forms in the current government system, the project could for the purpose of its work, define the HIS as

> "an information system designed to achieve two goals: 1) increased preventive health care coverage of targeted groups (children under five years of age, women of reproductive age) through promotion of increased use of the government service delivery system; and 2) increased knowledge of the major causes of mortality in the community, especially among children younger than five years and women of reproductive age".

If the HIS is defined in this way, then three forms included in the **present** system are key: the VHW register; the VHW census (derived from the register); and the home-based maternal and child health cards. Two other existing forms could improve the CHVs' ability to promote health behaviors, but are not so

essential and perhaps impractical, given the illiteracy of most CHVs. These are the CHV activity form and the CHV supervisory form.

Two forms in the proposed **new** system could strengthen investigation of mortality: the death record (VHW) and the death register.

Field visits to two communities illustrated in a qualitative way the difference that could be made by a conscientious VHW (though the two communities would have differed in other ways as well). In Ilaka 5, where one VHW register appeared up-to-date and accurate (on the basis of two household spot checks), there appeared to be good knowledge of ORT, family planning, and based on the VHW register, good immunization coverage, including coverage of newborns who were being reported to the CHV. There was a high level of interest in health activities and apparently a real liking for the VHW. On the other hand, in Ilaka 4, where the VHW did not even know what was supposed to be **in** his register, knowledge levels were poor, and assessment of immunization status was iioossible. Not surprisingly, the local community had a poor opinion of this VHW.

As part of the evaluation, a comparison was made of the SC/US family enrollment data to the VHW census and clinic register. The comparison used the VHW register for Ward # 6 (Jamdaha), and the Family Enrollment Forms (cards) for the same ward, showing a total number of 83 households listed. The comparison revealed the following:

o The number of households present in the Family Enrollment Forms but **not** in the VHW register was 25 or 30%;

o The number of households from the Family Enrollment Form that matched those from the VHW register was 58 or 70%;

o It was noted that **all** households matched from the Family Enrollment Form to the VHW register showed some discrepancy between records. These discrepancies were as follows:

- 28% or 23 households where all family members were recorded on the FEF were also in the VHW register, but there was a discrepancy in the health/age information for those members.

- 18% or 15 household where some family members were listed in the VHW register, and age/health information was correct for those listed.

- 24% or 20 households where some family members were listed in the VHW register but age/health information was incorrect for those listed.

o 27 of the households present on the VHW register were not listed among those on the Family Enrollment Forms.

Estimates of percentages of population in the Family Enrollment Forms who attended the local Outreach Clinics (over the previous three month period) in Jamdaha VDC are given in Table 4.

Table 4. Estimates of Achievement in Ilakas 4 and 5

Clinic type	# Attending in 3 months	# from FEF eligible to attend (etimated)	% Population attending
Antenatal	31	52	53%*
Under Fives	101	617	16%
Under Twos	60	210	29%

* The total population in this area is 3940. If one takes Nepal's birth rate to be 39/100, one estimates for a population of this size there will be 154 live births in a year; for 154 live births, one estimates there may be 231 pregnancies in a year, or 58 in three months.

* 31 mothers attended the clinic one time in the three month period; eight mothers or 15 percent came two or more times.

C. Assessment of Implementation in Key Technical Areas

Antenatal Care/Delivery

Routine prenatal care appears to be adequate (except for the absence of TT), although improved care could be provided. For example, antenatal care was provided at the Outreach Clinics by ANMs, but was not observed being provided routinely at the Health Post. The examination room at the Golbazar Health Post was untidy and dirty. Antenatal equipment was not properly stored. Cards were not filled in properly or completely. Drugs which were distributed were not recorded. Mothers were not encouraged to return for check ups, and child spacing was not promoted. At one Health Post, the ANM had attended a home delivery the morning the team visited, but she did not carry the kit box while attending that delivery. Teaching tools, which were available, were not used. (These findings were more dramatic at the Sukipur Health Post, which is not SC/US supported, than at the two supported by the CS project).

This locality is fortunate to have the positions of ANM at the Health Posts filled. In many districts this position is

vacant, due to a shortage of workers in that category. At the Outreach Clinics it was observed that ANMs checked for signs of anemia and edema; for fetal heart sounds; for fetal position; blood pressure; they advised on TT.

The CHVs are not promoting prenatal care at present. TT was generally available at the EPI sites (though not accompanied by the TT cards for mothers). TT availability appears to be sporadic at the Outreach Clinic and in the Health Post.

Of the 57 identified TBAs who were trained in this area by the government, 18 (three from six different VDCs) have been retrained by SC/US and the Health Post ANMs, using materials developed by the government.

Fewer than a third of the mothers informally interviewed in the field had been delivered by the trained (or untrained) TBAs. One of the reasons given by village mothers was that the TBAs charge too much. The evaluation team was unable to assess management of complications during pregnancy by the ANMs at the prenatal care sessions because no log books were available.

Referrals for high risk or complicated pregnancies are a problem in Siraha because poverty is a major obstacle. There is no current insurance mechanism. It was learned that Lahan Hospital could stabilize some mothers before their continued journey to Janakpur (if money for transport were available). Siraha District Hospital is not equipped or staffed to deal with obstetric emergencies.

Postnatal care focused only on newborns and not on mothers at the Outreach Clinics. At least some CHVs are reporting live births to VHWs and so are aware of cases which need postnatal check ups.

Acute Respiratory Infections (ARI)

ARI activities were not planned until the second year of the CS project, although the Outreach Clinics have already been supplied with drugs for treatment. The Health Post staff have had minimal, if any, training in the management of ARI cases. Though a sizeable number of children (perhaps 40 percent) coming to the health post are ARI cases, they are diagnosed and treated in the traditional manner, ignoring respiratory rate and other signs and symptoms. Although some staff do seem to know about ARI, many still do not, and as a result otherwise healthy children are given inappropriate and unnecessary antibiotics. It is a normal expectation of mothers in villages that their children will be provided with drugs at no cost. SC/US can play a role in helping the Health Post staff educate mothers about the unnecessary use of many drugs.

At present, health education to mothers in the early detection and prevention of ARI is almost nonexistent, although it was encouraging to see an ARI poster in the Nainpur Health Post.

At Health Posts and Outreach Clinics, supported by SC/US, liquid ampicillin and cotrimoxazole are available. The less expensive tablets of the same drugs are among those provided by the Ministry of Health, but they are not regularly available. It is suggested that SC/US consider provision of the tablet form of these drugs as well.

Diarrheal Disease

Oral Rehydration Therapy (ORT) corners are established in the Health Posts of both the Ilakas. The Outreach Clinics also have recently started demostrating ORS preparation and education of mothers on prevention and treatment of diarrhea and dehydration. While interviewing mothers on treatment of diarrhea and dehydration, preparation of Jeevan Jal (JVJ), and use of fluids and food during diarrhea, roughly two out of twenty seemed to recognize JVJ and were able to describe its preparation. However, this figure is much higher (60-70 percent) among women in the Nonformal Education classes. Pre and post tests are given to mothers at the NFE classes to assess knowledge.

Visits to a few villages disclosed that most VHWs carry out only limited health education activities on diarrhea although they do have good health education materials available. In general, they seemed somewhat unfamiliar with the content of the education materials. Similarly, health education materials for female CHVs were found in the Nainpur Health Post, but were lying unused. Posters and pamplets are supplied in sufficient quantity from the CDD section of the Public Health Division in Kathmandu.

The stock of ORS packets was reasonably good in the Nainpur Health Post, while the Golbazar Health Post had almost none. None of the drug stores in Golbazar had JVJ in stock, although Indian ORS packets costing more than Rs. 11 (as opposed to Rs. 3 for JVJ) were available. When villagers were asked what they did when they needed JVJ, more than 90 percent said the would go to the Health Post. This means that there would be a delay in the treatment of diarrhea cases, since the Health Posts are frequently out of ORS packets. Only a few said they would go to the CHV and request JVJ. The CHVs are meant to sell JVJ packets for Rs. 3, but the replacement mechanism for their stocks is not developed and most of them do no carry any supply.

Visits to two villages revealed that many of the mothers know to give rice water with salt, vegetable or cereal soup to their children during diarrhea. Food and fluid withdrawal did

not seem to be a problem. Roughly a quarter of mothers interviewed said they gave soft rice during diarrhea. The concept of adding a little oil or ghee to the child's food is nonexistent. Oil and ghee are expensive, often not available and traditionally not acceptable, in this locality.

No diarrhea treatment chart was seen in any of the Health Posts visited during the evaluation. Golbazar had absolutely no health education material exhibited. Nainpur had not only posters on diarrhea but also on ARI, family planning, and other health messages.

The role of the SC/US staff was visibly significant in organising and supporting Outreach Clinics which are attended by large numbers of mothers and children. On an average day about 100 mothers and 100 children under five years of age are seen. Antihelmintic, antibiotics, antidiarrheals, and vitamins are provided by SC/US to these clinics.

In the project areas of Siraha District, extreme shortage of drinking water is a severe problem, particularly as it relates to incidence of diarrhea. The past rainy season was not adequate and the team heard complaints of water shortages from villagers. Reports from health staff.of diarrhea cases appear higher than usual at this time of year.

Immunization (EPI)

The Ministry of Health policy is to limit immunizations to children under one year of age. This is due to a concern for targeting children early (under one year), vaccine wastage, and cost. The policy on immunization with tetanus toxoid for women aged 15-45 has recently changed, the recommended dose rising from two injections to five.

Three of the EPI clinics the evaluation team visited (unannounced) were held as scheduled, even though it was a local holiday. All were adequately supplied with vaccines (although one VHW lacked TT cards). On cursory examination, the cold chain maintenance appeared adequate.

It is impossible to assess community wide coverage using the data that are now available in the VHW registers. However, the information provided from the district EPI supervisor in the DPHO for the previous 12 months gave the following estimated coverage in Ilakas 4 and 5:

Table 5. Estimated EPI Coverage in Ilakas 4 and 5

DPT	BCG	Measles	Polio	TT

1	2	3			1	2	3	1	2	3	4	5
57%	53%	44%	62%	43%	57%	52%	44%	11%	10%	6%	2%	1%

Data from the CS baseline survey conducted at the beginning of the project, for those children with an immunization card (31 percent of those surveyed), showed: 16 percent of children had had DPT 3; 15 percent had polio 3; 13 percent had measles; 28 percent had BCG; and 18 percent of mothers had a card showing two or more TT injections.

Family Planning

The estimated contraceptive prevalence rate (CPR) for Siraha District, at 14 percent, is considerably lower than the national average of 25 percent. As is the case in many areas of Nepal, the constraint is primarily a lack of services and providers, rather than lack of motivation on the part of clients. It appears there is a high unmet demand among villagers in Siraha for family planning services, particularly voluntary surgical contraception (VSC), that does not require additional IEC. Although health workers in the sites visited knew the various temporary contraceptive methods, little effort was made to offer them to clients. Health staff appear to be uncomfortable and reluctant to discuss family planning. Additionally, almost no educational material or information on family planning was seen, and no displays of contraceptive methods were present in any of the service sites. There has been no concerted focus on family planning through the CS project.

Supply of contraceptive commodities is a serious problem throughout the district (as it is in much of Nepal). The Golbazar Health Post had no oral contraceptives or condoms. The Nainpur Health Post had about 30 vials of Depo Provera but no syringes. At the Sukhipur Health Post, some oral pill packets were found, lying on the floor in the storeroom. Depo was available in limited quantities, at some Outreach Clinics, where it was the only contraceptive provided. VHWs and CHVs do not have either pills or condoms available for distribution. The Stores Manager in the DPHO said he had minimal stock and was not distributing what he did have. There was no evidence of a "proactive" approach in the district office to improving the situation. The District Store had the following quantities of commodities:

Condoms	- 2000 pieces
Pills	- 800 cycles

Depo	- 300 vials
JVJ	- 3000 packets
TT	- None (for 2-3 months)
DPT	- None (for 2-3 months)
cotrimoxazole	- 600 tablets
Vitamin A	- None

Supply of drugs to the Health Posts is not a responsibility of the CS project. However it is a constraint to service delivery when drugs and commodities are not available at the service delivery site. The CS project should do all it can to facilitate better communication between the Health Posts and the DPHO to ensure that adequate supplies of drugs are available.

Because of the history of the national program in Nepal, "family planning" is synonymous with voluntary surgical contraception or sterilization, and is the most requested type of family planning service. Unfortunately for the past year, there have been no voluntary surgical contraceptive services offered in Siraha District. As a consequence, there appears to be a backlog of patients waiting for the service. (In the village of Chandra Lalpur, when told about the camp, 15 women said they wanted to go for services). During the week that the evaluation team was in Siraha district, they visited the Lahan Hospital and met Dr. Gyanendra Adhikari, the Hospital Superintendant. He was beginning a 15-day long VSC "camp" that week, based at the hospital, during which he hoped to serve up to 400 clients. Information about this camp, which is coordinated through the DPHO, did not seem to be well communicated to Health Post staff (or potential clients). Transportation is a major constraint for the camp, since VSC patients are usually returned home after the procedure and a vehicle for this purpose is difficult to manage.

Norplant is not available anywhere in the district, although Dr. Adhikari has been trained in Norplant insertion. He stated he was willing to offer this method at the hospital.

The almost constant turnover of government staff in the district is another major constraint to provision of family planning services. Services may be started, but as soon as the physician provider is transferred, the services terminate.

Nutrition/Growth Monitoring

Malnutrition is a major problem not only in this locality but in the country as a whole. As it involves multiple factors, it is very difficult to ameliorate. A highly integrated program involving assistance to rural areas in agriculture, improving economic activity, and adult education, can be very helpful in solving this serious problem. The evaluation team believed effective nutrition interventions were so difficult to achieve,

that perhaps the project could better focus on improving nutrition through promotion of treatment for ARI, ORT use during diarrhea, and measles immunization.

The present program at the Health Post and village level seems to be limited mostly to measuring the weight of children and distributing vitamin pills. Village Health Workers say they are measuring the upper arm circumference of children using a Shakir's tape. However, inquiries in the villages reveal these activities do not seem to have been carried out as reported. Although they are supposed to visit the homes of malnourished children to provide individualized education and follow up, few VHWs or CHVs actually seem to do so.

Most (perhaps 95 percent) of children are given breast milk up to the age of two years, although many mothers complain of inadequate milk supply. Supplementary feeding is often delayed for more than 12-14 months in this area. Usually, after six to eight months, children are given buffalo or cow milk, if affordable and available. Very few messages about proper supplementary feeding reach the village. The hygenic aspects of young child feeding are still in the distant future.

Health education on the use of nutritious food is often given in the Health Post and Outreach Clinics. But if the program involves only education of mothers and does not provide any supplementary food or drugs, mothers pay very little attention to it. Preparation of sarbottam pitho (a mixture of corn, soya bean and wheat) has been encouraged in this area, with only a little success. A group of women were taught how to prepare it and encouraged to sell it to mothers during Outreach Clinics. But very often mothers came with no money to buy it, and they showed no real interest in procuring it later.

Vitamin A

The Ministry of Health has recently adopted new policy guidelines regarding Vitamin A capsule distribution and use in Nepal. Siraha District is one of seven target districts chosen by the MOH for the initial implementation of the national strategy. For prevention of Vitamin A deficiency, children six to eleven months will receive one dose (100,000 IUs) two times each year, before and after the high diarrhea monsoon season. Children 12-60 months will receive 200,000 IUs twice a year. Severely malnourished children will be especially targeted for prevention of Vitamin A deficiency. Children with measles and/or prolonged or chronic diarrhea will be treated with 200,000 IUs (100,000 if less than six months old), but not if they received Vitamin A in the previous month. During the capsule distribution campaigns, the recording will be done by simple tallies, with no attempt to register individual names. The CS project will be

actively involved in the upcoming Vitamin A distribution campaign.

No systematic survey of Vitamin A deficiency was possible during the evaluation, but by report, 15 percent of children seen at the Lahan Eye Hospital displayed signs of Vitamin A deficiency. One mother of a low birth weight infant seen at an EPI clinic site reported night blindness during her last pregnancy.

It is uncertain if green leafy vegetables are included in the supplementary foods prepared for children in this area (they are considered to promote diarrhea), or adequately consumed during pregnancy.

Nonformal Education

Overall, the NFE training activities of SC/US have accomplished more than the NFE training program of the government. The training program designed for adult learners, both male and female, is good and appropriate for the groups. Program content is specific and based on community needs.

Among the strengths of the NFE program are the following:

- Wide interest shown by community members
- Selection of facilitators and supervisors from the community
- Training of the facilitators and supervisors
- Selection of the timing (evening) and sites (in the villages) for the courses
- Provision of supplies, such as kerosene for lanterns
- Community involvement and contributions, such as paying registration and tuition fees, buying books
- Inclusion of technical messages on health and appropriate support materials
- Follow up with womens' groups and materials for new literates

The project has also been active in promotion of female literacy through a series of nonformal education classes. These classes use a curriculum with a strong health focus, and health

information is provided to mothers through followup materials as well.

Table 6. Child Survival Project Nonformal Education Program FY 1991/92

	Centers	Female	Male
Basic centers	97	2,112	92
Advanced centers	6	110	0

The program has targeted CHVs for its literacy classes and during 1991-92, there were 18 basic graduates among the CHVs.

Table 7. Child Survival Project Nonformal Education Program FY 1992/93

	Centers	Female	Male
Basic centers	67	1,358	208
Advanced centers	45	767	11

During 1992-93, there were 53 CHV participants; six TBA participants; and 186 Mothers' group member participants.

The program's ongoing monitoring and supervision appears to be a key element in its effectiveness and should be continued. An evaluation process needs to be developed, in collaboration with the government, paying special attention to followup support and materials for newly literate women.

D. Assessment of Community Education and Social Promotion

There is a good balance in this project between health promotion, social mobilization and service provision. The NFE classes are a particularly relevant example of a strategy to improve female literacy, women's status, and capacity for income generation, while at the same time providing information about health issues as part of the literacy curriculum.

Nonformal education is the closest link between the other development efforts of SC/US and the CS project activities. Women who attend the NFE classes are a target for health education as well as service delivery, as are the CHVs (and trained TBAs) who attend the literacy classes.

The project has used focus groups to gather information about various health attitudes and practices. For example, focus groups were held to discuss diarrhea, mothers' perceptions of what constitutes diarrhea, how to treat it, etc.

SC/US has evaluated the effectiveness of literacy classes (in Gorkha), documenting the actions of mothers regarding identification and treatment-seeking behavior for children with ARI, practice/use of JVJ, and family planning practice. They are also reviewing the effectiveness of using the national Nepali literacy materials, for populations that are non-Nepali speaking, as in the Maithali speaking areas of Siraha.

The project is now beginning to implement many of the IEC activities which were planned. For example, the project has used a local drama group to give health education messages, such as information on AIDS and STDs, at the special "camps" the project organized.

E. Assessment of Resources for Child Survival

As proposed in the Project's Implementation Plan, there are the following staff in the Siraha field office:

Dhana Malla		Project Coordinator
Ram Dayal Shah	-	HIS Supervisor
Gopal Tamang		Assistant Accountant
Chola Kant Sharma	-	IEC Coordinator
Shyam Sundar Jha	-	Training Coordinator
Ishwor Khatry	-	NFE Coordinator**
Khila Nath Nirala	-	Assistant NFE Coordinator
Janaki Shrestha	-	Staff Nurse
Lila Nath Pandey	-	Staff Nurse
Janaki Chaudhary	-	Staff Nurse
Kalyani Shah		MCH Worker
Bela Ghising		MCH Worker
Binita Ahikari	-	MCH Worker
Anita Chaudhary	-	MCH Worker
Marsha Dupar		Project Advisor*

* The Project Advisor spends approximately fifty percent time in Siraha and the other fifty percent in the Kathmandu SC/US office, all focused on the Child Survival project.

** The NFE Coordinator is 50 percent time on the CS project.

These staff receive backup from the SC/US Kathmandu office from the Public Health Program, and other technical staff, in the

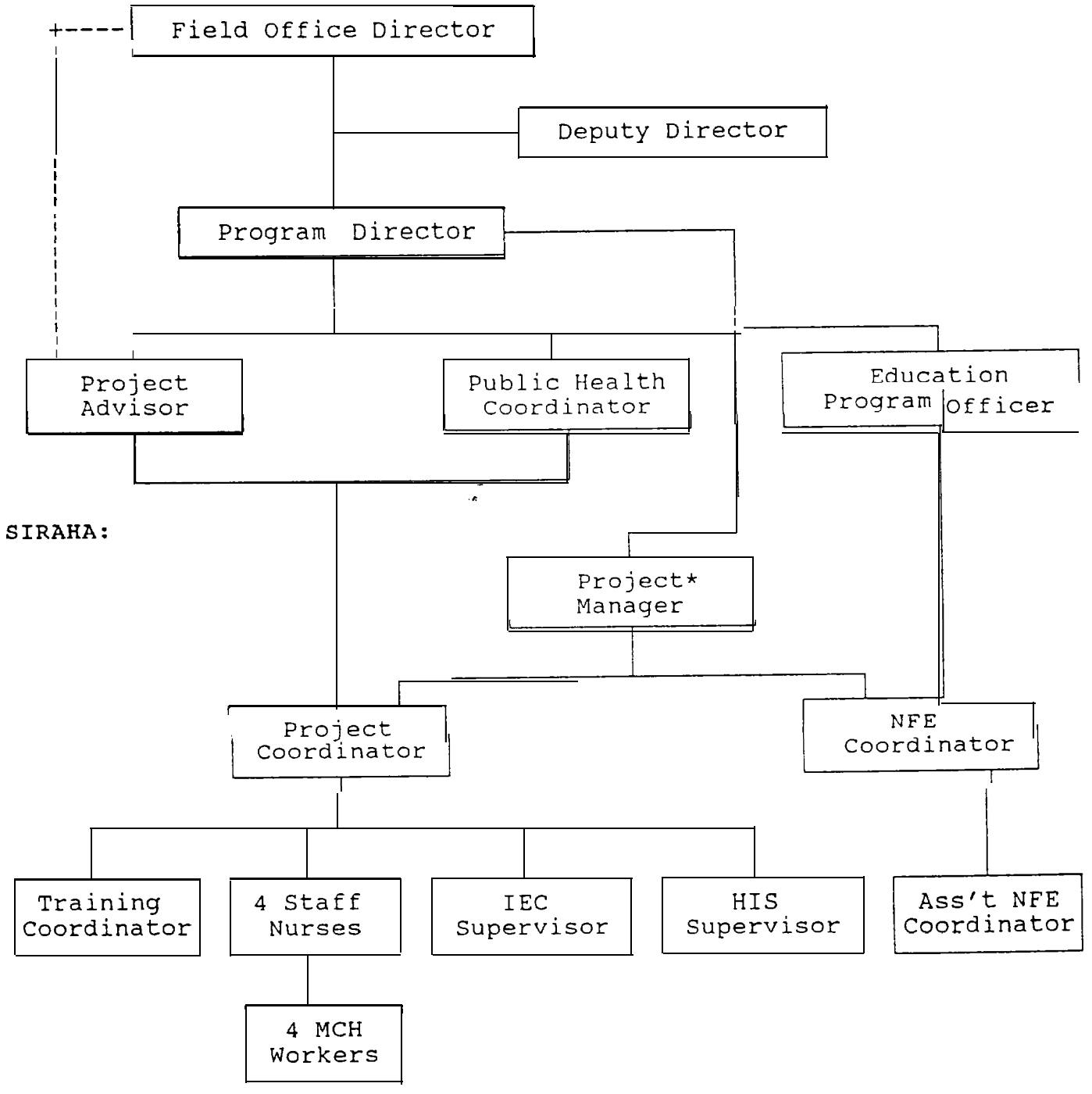
areas of finance, education, training, programs, and human resources, as well as from the Program Director, Deputy Country Director, and the Country Director. Backup is also provided by the Siraha Project Manager and other Siraha-based support staff.

In the field, the project is structured so that it has management inputs from both administrative and technical lines of authority and responsibility. This division appears to work fairly well, as long as close coordination between program and administration is maintained. Administrative staff who are involved in decision making about project implementation, need at least a minimum understanding of the health issues related to such project implementation. At the same time, technical staff should understand budget monitoring, and have supervisory and monitoring skills. The presence of a strong Project Coordinator, with both technical and managerial skills, will be an asset for project implementation. The project should strive to maintain clarity and division of responsibility among technical staff in the field, so there is no confusion about roles or duplication of efforts.

The project is somewhat behind its' planned implementation schedule in part because of high staff turnover, early in the project implementation. For example, the current Project Coordinator (who began in February 1993) is the third since the project began. One was released based on performance, and the other left the project for personal and family reasons. Although recruitment began early on, other essential staff (i.e., the Training Coordinator) were not in place until several months into the project implementation. Recruitment of suitable candidates, particularly those who are Maithali-speaking, was difficult and time consuming. Additionally, the short duration of the proposed contract, for the 1-2 years remaining of project implementation, was not attractive to many local candidates. This is a limitation of a three year project grant.

Another group of key village level staff, the MCH workers, only recently finished their training, and were posted to the field. The full complement of project staff are now in place. The organizational chart for the project is given in Figure 1.

Figure 1. Child Survival VII Project Organizational Chart



* This is a SC/US management position in the Siraha Field Office. The Project Manager reports to the Program Director.

The numbers and mix of staff appear to be quuite adequate to meet the technical, managerial, and operational needs of the project. The SC/US staff are hardworking, energetic and committed. The local counterparts to these staff are the various cadres of MOH staff (e.g. DPHO, Health Post in Charge, AHW, ANM, etc). The breakdown of counterpart staff in the project areas is as follows:

Table 8. Number of MOH Staff in Project Area

MOH Staff Category	Ilaka 4	Ilaka 5
Health Post in Charge	1	1
AHW	2	2
VHW	12	12
ANM	2	2
Cold Chain Assistant	1	
Peons	3	3

At the DPHO, based in Siraha town, the following staff positions are provided: DPHO, Public Health Nurse, EPI Supervisor, CHV Supervisor, Statistician, and Stores Manager.

Local Management committees have also been set up as part of the project. These include:

- 2 Health Post Management Committees (for Golbazar and Nainpur Health Posts)
- 12 Outreach Clinic Management Committees

F. Assessment of Supplies and Material for Local Staff

The local Siraha based staff have adequate supplies to carry out their activities. However, they are hampered by the difficult local conditions under which they must work. For example, the town of Golbazar where the Project office is located, is not electrified, making computer use dependent on batteries. There is only one telephone in the town, which is solar powered, and does not work on overcast days. The project does not have a vehicle based in Siraha, although motorcycles have been provided and are used by male, and a few female, members of staff. Bicycles have also been provided for project staff.

G. Assessment of Quality

Local SC/US CS Project staff are well trained and competent. They certainly have the technical knowledge and skills sufficient to enable them to carry out their project responsibilies. In fact, the team has such a reservoir of education and field experience, they represent a real resource for the MOH in Siraha District. Several of the staff most closely involved with the project have implementation experience from the CS III project in Gorkha, and many also have a Ministry of Health background.

"Quality of care" is a major concern for the staff of this project. This topic has been particularly salient since the project works through the MOH service delivery network and does not itself provide services. The project constantly must face the constraints to service delivery that plague the MOH services throughout Nepal (such as lack of transport, lack of regular supplies, lack of equipment, poor physical facilities).

For example, while visiting the Siraha District Hospital, the team found a woman in the female ward who had an hour before delivered her fifth child. There was no sheet on the bed, or blankets, and no relative to provide her food. The hospital store has 8 sheets for 15 beds and an equal number of blankets. There is no fund for providing food for such patients, let alone blankets or clothes for the baby. In the male ward, a patient diagnosed with an intestinal obstruction, was on an intraveneous (IV) drip. The hospital had in stock a total of eight bottles of IV fluid. The patient, who was to have been referred for surgery to the Janakpur Hospital, was poor and could not produce Rs. 600 necessary to pay for the ambulance service to transport him to the nearest hospital with surgical facilities.

The project acknowledges the limitations under which it works, as indirect support to government service providers. Project staff should realize that their expectations for improving the quality of care under such circumstances may of necessity be lower than if they were providing services themselves. Suggestions to the project team, from the assessment, to attempt to improve qualtiy of care, are things which strengthen the regular government system as it currently exists, and which can be employed without additional manpower or financial resources. For example,

- Review the client flow at Outreach and MCH Clinics to allow the AHW more time to spend with individual patients on patient history, diagnosis, and counseling.
- Test ways client waiting time at Outreach and Health Post Clinics can be reduced.
- Identify very specific roles and responsibilities for all

staff at Outreach Clinic - such as using the TBA who attends as a "traffic cop" to keep the clients moving, direct the flow, and discourage onlookers from crowding into client waiting areas.

- Assign the SC/US staff nurse, in a floating position within the clinic, the responsibility for "triage" or identifying mothers and/or children who need special attention, service or individual counseling. For example, at the Mahanaur Outreach Clinic, the staff nurse was able to take aside a mother from the growth monitoring session, with a very small, underweight baby, and a history of four child deaths, for nutrition and family planning counseling.

- Identify or design protocols for treatment of diarrhea, ARI and eye diseases, and post them for the health worker and at clinics, to attempt to standardize the treatment of these problems.

- Through training of MOH staff, improve their physical assessment skills, to provide more comprehensive prenatal care and better case management.

- Ensure availability of necessary drugs, such as family planning commodities at Outreach Clinics.

H. Assessment of Supervision and Monitoring

The role of SC/US in motivation, supervision and monitoring is perhaps the most important aspect of the CS project design in Siraha. Since the government health workers are the service providers, and there appears to be very little supervision from the government side, the SC/US staff provide technical assistance, oversight and monitoring. SC/US staff have a valuable role to play in assuring a better quality of care at outreach clinics. For example, the SCF staff nurse can assist with client flow at the clinics to ease congestion. She can "float" and help identify and provide individual counseling for high risk clients.

This supervision role is a delicate one that requires extreme tact on the part of SC/US staff. The SC/US staff attempt to "teach by example" rather than using a more didactic and one-sided approach to supervision found among some government staff. MOH health workers tend to resent what they may see as interference from SC/US staff, or being told what to do. Also there is the notion that because of SC/US's efforts to etablish (and regularly hold) Outreach Clinics, and conduct all EPI sites, they have to do more work (in fact, an accurate perception).

Nonetheless, SC/US will continue to place a high priority on this role, through a combination of human and material resource support, technical assistance, and training. Effective supervision and monitoring are perhaps the most effective ways to improve service delivery and coverage.

I. Assessment of Use of Central Funding

Administrative monitoring and technical support from the Save the Children Nepal office in Kathmandu has been appropriate in terms of timing, frequency, and needs of the field staff.

Funds for administration serve a critical function as it is essential for staff from the Kathmandu office to assist field staff in certain aspects of the project, particularly in negotiations with the DPHO, regarding the project's role.

The SC/US office and the CS project have developed good working relationships with the USAID/Nepal Health and Population (HP) office, and seek input on a periodic basis. These discussions have included the role of SC/US and the CS project in the AID/Nepal country strategy for health and population. For example, USAID/Nepal has asked that the CS project take an active part in the upcoming Vitamin A distribution campaign in Siraha District. The Deputy Chief of HP Office, Ms. Molly Gingerich, accompanied the evaluation team on most of the site visit to Siraha.

J. Assessment of PVO Use of Technical Support

The project has used some local technical assistance in the form of consultants (e.g., focus group discussion training). Technical assistance from within the Save the Children organization is readily available to the project. For example, staff from the previous CS III project in Gorkha have been routinely consulted. Technical assistance is also provided from the SC/US headquarters in Connecticut. This includes support in writing the project proposal, and assistance in research design and implementation. The technical assistance from Westport provides opportunities for inputs from other CS and related projects, such as that in Bangladesh.

K. Assessment of Counterpart Relations

The CS project staff have put considerable energy into developing and maintaining good counterpart relations with government staff (both in Siraha and Kathmandu), since this is crucial to successful implementation of the project. The project can encourage, advise, and support MOH activities and staff, but

ultimately has no authority over operations of government health services. The project must in many situations rely on the DPHO to take action. For example, although the CS project can strongly encourage the need for improved supervision in the field, it has no authority to enforce this suggestion. Similarly, although the project may note the detrimental effect of lack of drug supply, it has no authority to administer drug supply and logistics. Nor does the project have any control over MOH staff deployment and transfers.

The CS project has benefitted from the fact that several key members of the Siraha team have Ministry experience and are very familiar with government policies and procedures. They also have good contacts within government at various levels. Relationships with counterpart staff are sufficiently good to ensure that the project runs smoothly. However, in a few instances, because the project coordinates and plans implementation with the DPHO, decisions have been delayed by his frequent absences from the district.

L. Assessment of Referral Relationships

Referrals pose a major problem for the CS project in Siraha, and this was a concern of the evaluation team. The possible referral points in the area are the Siraha District Hospital, the Lahan Hospital, and the Janakpur Hospital. (The evaluation team made site visits to the first two hospitals). All three are government hospitals, but only the last has the capacity to deal with complicated pregnancies such as those requiring a Ceasarian section. It is also the furthest distance from the project area. For many women access to any of the hospitals is a major problem, because of transport and the lack of money to pay for it. The average walking distance to Lahan and Siraha hospitals is several housrs, while the distance and logistics to reach Janakpur Hospital are even more complicated.

However, the overriding concern for the project is the service available once a woman or child reaches the hospital, and the quality of care provided. Both hospitals visited are understaffed, undersupplied, and have extremely limited resources. There is no laboratory for routine tests, nor is there diagnostic equipment (such as X-ray or sonogram). In many cases, the type of services the patient needs are simply not available at the hospital.

The SC/US project has a referral fund which is available through the "Poorest of the Poor" program of the integrated SC/US project, which subsidizes 50 percent of all drug costs for indigent patients, and also provides money for transport. Approvals for use of this referral fund are made by the Health Post Management Committee. This can sometimes cause a delay in the patient receiving services. For example, a boy of about

eight years was seen at the Outreach Clinic with a fracture of his right arm. He and his father were referred to the SC/US office to collect money for transport to the hospital. The father was not able to collect the money until the next day and because of a public transport strike, the boy was not able to reach the hospital until at least five days after the arm was broken.

CS staff reported that in the past the referral fund has been a major source of problems for them, as there was much abuse of the system.

On some occasions the SC/US vehicle has been used to transport emergency patients to hospitals in the district or even to Kathmandu. The CS project may want to investigate the possibility of "contracting" for ambulance services from the Red Cross when necessary.

M. Assessment of PVO/NGO Networking

The SC/US project has "networked" with other local PVOs and NGOs who are conducting child survival activities. The evaluation visit was able to identify additional NGO coordination opportunities that may be useful for the project. For example, the evaluation team learned that in Siraha District (but not in Ilakas four and five), the Nepal Red Cross runs a depot holders' program for family planning commodities, with which SC/US may be able to collaborate.

N. Assessment of Budget Management

The amount allocated by USAID to this project is $500,000 for the three year period. In addition, the match from Save the Children is 33 percent of the AID total, or $165,000. The overall sum available for the project is $ 665,000. The breakdown of the budget is given in Table 9.

Table 9. Child Survival VII Project Budget

Funding Source	Year I	Year II	Year III	Total
AID	$117,832	$211,016	$171,152	$500,000
SC Match	$ 38,885	$ 69,635	$ 56,480	$165,000

The rate of expenditures to date is lower than that anticipated in the budget for year I of the project. In the first 12 months of the project, the expenditures were about 83 percent of the total amount budgeted for the year. Expenditures for the current project year are running at a slightly higher rate. The budget management appears to be very conscientious and no major budget shifts have occurred. The project can continue to progress toward its objectives, with the remaining funding. There is a possibility that the budget may be underspent (at current spending rates) by the end of the project.

Three suggestions arose out of review of the financial record keeping system. They were: 1) The need for clarification between Westport and Kathmandu, of final approved budget totals, for each year of the project. 2) On a regular basis, the expenses incurred in the Kathmandu office, which are attributed to the CS project, be transmitted to the accountant in the Siraha project office, so that he has more complete picture of expenditures by line item. A similar recommendation is made for expenses so incurred in the Westport office. Also, 3) the budget amount earmarked for all expenditures, by line item, be made available to the Siraha accountant. With these changes, the Siraha based accountant would have a very useful breakdown (on one spreadsheet) for purposes of financial management in the field.

VI. Lessons Learned

The evaluation team attempted to summarize the most important "lessons learned" from this project which have applicablity to health service delivery in Nepal. They are:

- o There is a tremendous need for improved supervision at all levels of the health service delivery system, but particularly for village level workers. This is an issue that is "bigger" than the SC/US project area, and possibly applies generally to Nepal.

- o The present efforts of the Ministry of Health in developing and distributing health education materials like flip charts, pamphlets, posters, stickers, etc. need to be closely monitored so that they are not misused or unused (lying in the Store). It would be encouraging to see such materials in more villages.

- o There is a need to increase public awareness of health issues, particularly at the community level, to encourage requests for services from that sector. The community outreach aspects of the CS project support this goal.

- o More effective training of MOH staff at various levels should be provided, particularly in the areas of improved case management (e.g., ARI, high risk prenatal women).

- o Staff performance can be improved through a system of regular assessment and evaluation, with corrective action as necessary; and through a scheme to provide incentives or nonfinancial rewards for outstanding achievement. Specific criteria for such awards can be developed.

- o The utility of a good community based register should be much more emphasized, for use in identifying, targeting and providing follow up to high risk mothers and children.

- o Health workers should be encouraged to place more stress on person-to-person or group health education activities when opportunities permit, so that communities and mothers become more and more self reliant.

- o The imposition of too many "top down" targets focuses attention unnecessarily on numerical achievement of targets, perhaps to the detriment of other project implementation aspects.

- o The design of the project was developed to cover all

aspects of child survival, which may be too many topics to focus on simultaneously. A narrower focus on three or four interventions (e.g., EPI, Vitamin A, family planning) may be more productive in the end, if the project can "do a few things really well".

- The creation of Management Committees at the Health Post level and the Outreach Clinic level, has been a very useful strategy to instill community participation and "ownership" of health services.

- The three-year time frame of the project is very short and leaves little room for flexibility in implementation, or unplanned events (e.g., staff turnover).

- The combination of literacy training, especially for women, and an integrated community development program, with a strong health component, has proved a very successful development strategy.

- Use of health education materials in the literacy curriculum, particularly for women, is an effective way to reach a large target audience with health education messages.

VII. Recommendations

The assessment team decided on a number of recommendations as a result of the discussions and observations of the evaluation. They are divided into two categories: those that deal with the technical areas of the project's implementation, and those that relate to other aspects of the project. Recommendations on technical issues appear first.

Acute Respiratory Infection (ARI)

o ARI can kill children quite quickly, but if treatment is instituted in time, it also saves lives easily. Early treatment is possible only when there is high awareness among mothers of when to give home treatment to a child, or to refer her to a health post. A major opportunity exists in this project area, as eventually a large number of mothers will become literate (through the NFE classes), and this should be helpful to the ARI efforts. It is recommended that a type of operations research on ARI be carried out in this area. (The SC/US project staff mentioned interest in training project area medical shopkeepers, and "quacks", the former malaria workers, in ARI diagnosis and treatment). This could be useful to the government to learn what is feasible and effective in reducing mortality due to ARI in the terai areas of Nepal.

o As in other areas of the project, training in ARI is also quite important. Such training should be carried out for various staff with several purposes. For example, CHVs trained in diagnosing and treating ARI cases, will need a supply of antibiotics to give to mothers. VHWs, who are not based in individual villages are not as likely as CHVs to identify ARI cases in time, are not given antibiotics. But they need training to properly supervise the CHVs. The role of the SC/US staff should be to concentrate mainly on monitoring the whole system, and taking remedial measures in case of a problem.

o SC/US can also provide input to the preparation of ARI treatment protocols, distributing them to Health Posts and Outreach Clinics. As with diarrhea, ARI charts should always be exhibited in front of a health worker examining ARI cases.

o Drugs are one of the most important components in an ARI program. They include potent antibiotics, which are costly, and must be used promptly. Given these constraints, SC/US can plan a drug supply program keeping in mind that it must be feasible and sustainable even when SC/US discontinues its activity in the area. Since SC/US has a highly integrated total human development program, it should face few problems making such arrangements. The CHVs can be a good delivery channel for such drugs, with the womens' development groups as the next best

alternative. The need for effective training and supervision for these groups cannot be overemphasized.

o The targets (and objectives) for ARI should be revised. Reaching 25 percent of children with "difficult breathing" may not be a suitable target - at that time it will be too late to treat most children.

Antenatal Care/Delivery

o Promotion of antenatal care by CHVs will be strengthened if they are well supervised by VHWs. This requires that the VHW be aware of all pregnancies in the community and follow up on those not attending the prenatal care at the Health Post or Outreach Clinic. Supervisory spot checks should be conducted by Health Post staff regarding information on newborns and pregnancies in the VHW registers.

o Strengthen the ability of the ANMs to treat complications during pregnancy by developing protocols, such as those developed by SC/US in Bangladesh. Although the CS project must rely on the MOH drug supply system, which is often inadequate, the focus on maintaining and improving this sytem should be a high priority for the project in conversations with the DPHO.

o Monitor the proportions of pregnant women who actually attend antenatal care: compare the clinic register to the VHW register.

o Deliver iron tablets to the homes of pregnant women via CHVs.

o Explore the establishment of Emergency Referral Funds through womens' groups.

o Ask MCH workers and TBAs to visit the homes of pregnant women within two weeks postpartum and check: brestfeeding; report problems to the ANM; report outcomes of pregnancy (e.g., stillbirth, live birth, neonatal death) to VHW; ensure that MCH workers, TBAs, and ANMs can differentiate stillbirths from early neonatal deaths; promote contraception.

o Continue to train TBAs and try to promote use of them, but given that many mothers do not now use trained TBAs, continue to teach mothers about the "three cleans" and the need for early referral of complications.

o Returning to the government antenatal card when the current stock of new cards provided by SC/US is used up.

o Change the immunization objective for TT to read "50% of women aged 15-45 will receive at least two doses of TT".

o Ensure that TT is always available at the Outreach Clinic and Health Posts.

o Introduce the "Safe Birth Kit" which SC/US is developing, into the project area.

o Adopt as indicators

- for "eat more, know the three cleans" - the final survey

- for antenatal care - compare the clinic register to the VHW registers and/or estimates of pregnant women in the community, and the final survey

o SC/US staff and MOH staff should meet as regularly as possible (given the constraints of scheduling meetings with the DPHO) and jointly identify areas and strategies for improvement.

o Referral points should be updated, and given the state of the referral sites, improved case management at the Health Post level should be encouraged.

Diarrhea

o Training as planned should be carried out, emphasizing the more practical aspects of diarrhea management. The government mechanism should be used for this purpose with SC/US staff closely monitoring their activities and supporting only when necessary. It should be assured that VHWs not only have knowledge about diarrhea but that they also use it in the community. The CHVs/TBAs are instrumental in diarrhea management as well. They too should be regularly supervised and their activities monitored.

o The availability and use of ORS packets should be tremendously increased, both inside the Health Post and outside, in the villages. SC/US can help the Health Posts initially by preparing diarrhea reports which are prerequisite to a regular supply of ORS packets. (The Health Posts don't currently get supplies in time, in part, because they don't report their usage rates). For outside supply of ORS packets, SC/US can facilitate the supply of Jeevan Jal from Royal Drug Co. to local shopkeepers or develop a commercial strategy whereby JVJ is available even on discontinuation of the SC/US initiative.

o Families should be encouraged to have at least two packets of JVJ at home. In addition to use of JVJ, mothers

should be reminded to use rice water, vegetable or cereal soup, early on during diarrhea. Emphasis on feeding during diarrhea and after to promote "catch up" growth should be continued.

o Once the treatment charts for diarrhea management are available, SC/US can help by mounting them on boards and giving them to the Health Posts. The feasibility should be explored for the Outreach Clinics as well.

o SC/US should advise the Health Posts to collect pamphlets and posters and use them in the Health Posts and safe places in villages. It is important that such information and educational materials are available, and used, before the beginning of the upcoming diarrhea season, or during diarrhea outbreaks.

Immunization

o Given the change in the MOH policy, revise the objective for women aged 15-45 to read "50% of women aged 15-45 will have at least two TTs."

o Ensure that TT (and cards) are available and offered at all Outreach Clinics and Health Posts.

o Check reports that the scheduled EPI sites have not occurred and take action for follow up with VHW supervisors.

o Train CHVs, VHWs, and TBAs in following up defaulters and avoiding missed opportunities; train CHVs in reporting newborns to VHWs so they can be entered in the EPI registers.

o Improve supervision of VHW EPI activities:

- Management Committees report to the Health Post if the EPI site is not held;

- Health Post staff members conduct home visit spot checks to verify immunization data recorded for that household in the VHW register;

- Assist/train the DPHO to monitor immunization coverage and take action if the EPI sites are not held; the DPHO should conduct regular field visits, including Health Posts and outreach sites.

o Refresher EPI training should be offered to workers at various levels and should include calculation of immunization coverage and a strategy for avoidance of missed opportunities.

o Use EPI reports copied to SC/US to do quality control: compare the number of completely immunized children to doses dispensed.

o Explore means to properly dispose or incinerate used vials and syringes.

o Indicators of community wide coverage are: baseline/final surveys, calculate the proportions from the VHW registers, assuming that there is full coverage of the community in the register.

Family Planning

o SC/US should place additional emphasis on family planning in its project area, given the relatively high existing demand for services (particularly VSC), not requiring additional IEC or motivational input. This should be done through training of MOH staff in contraceptive technology and family planning counseling skills, and through encouragement of health staff to routinely discuss family planning with clients.

o SC/US should investigate the type and area of coverage of the Red Cross activites in the district to determine whether coordination is possible. The DPHO said they have developed a "depot holders" program.

o As with other drugs provided through the MOH drug supply system, SC/US should ensure that family planning commodities are available at the Health Posts, Outreach Clinics, and for VHWs and CHVs. SC/US can investigate the strategy of using CHVs as "depot holders" in their villages for pills and condoms.

o Through NFE classes and mothers' groups, SC/US should encourage communities to demand VSC services on a regularly scheduled basis. SC/US should investigate the possibility, with Dr. Adhikari, of initiating once or twice monthly VSC days at the Lahan Hospital. Information about VSC camps should be provided to women in NFE classes and mothers' groups, and to TBAs.

o SC/US should investigate, with Dr. Adhikari, the possibility of introducing Norplant services at the Lahan Hospital (or the potential for offering Norplant at other sites in the area through trained non-physician health providers). SC/US could facilitate acquisition of Norplant supplies for the hospital, through the MOH in Kathmandu.

o SC/US should consider developing a training session for health staff, for MCHWs, CHVs, VHWs, and TBAs, focused on counseling skills for family planning (and STDs and AIDS). SC/US in Kathmandu could coordinate with the Kathmandu office of the

Family Planning Association of Nepal (FPAN) training staff, regarding course content and materials.

Health Information Systems

SC/US recognizes that all MOH workers will still be required to fill out all 17 of the required government forms and will continue to train them to do so in a more effective manner. This training however, will emphasize completion of those forms listed below which are most likely to improve community coverage and knowledge of mortality. SC/US HIS activities should focus on strengthening the performance of VHWs and facilitate the establishment of CHV "depot holders" for condoms, oral contraceptives, iron, and JVJ. SC/US should continue its' efforts to assist MOH staff to analyze and use community data, particularly at the Health Post level. For example, at the two Health Posts, SC/US is encouraged to help develop charts of area coverage (e.g., EPI, family planning) and teach Health Post staff how to track progress.

SC/US aims to achieve higher community wide coverage through expanded use of government services. Its objectives are stated in terms of community wide proportions, not service statistics. SC/US appropriately does not plan to update its Family Enrollment Forms or maintain an HIS that parallels the government system. This would not be sustainable. It must therefore rely on VHW registers for data about community wide coverage (eg., EPI, FP) and on VHW/CHV performance to increase service utilization. The following rcommendations focus on this aspect of HIS:

o Since SC/US has family enrollment forms from its initial enrollment, they should be used to improve community coverage in VHW registers. The HIS Supervisor has been trained to compare FEFs against VHW registers.

o Since increased health coverage will result from increased use of government services rather than from direct service delivery by SC/US, it will be important to periodically approximate the proportion of community residents who are actually using services by comparing clinic registers against the VHW registers. The HIS Supervisor has also been trained to do this.

o The following activities will also increase the likelihood that the VHWs will perform as expected:

- Educating and informing the community about what should be expected from the VHWs;

- Persuade the ORC Management Committee members to inform health post staff if the EPI clinic does not

occur or if the VHW is not active;

- Instruct members of the local womens' groups (and through NFE classes) to inform the Management Committee of problems with the VHW.

o Improving supervision of the VHW activities at the Health Post and DPHO levels.

- Health Post staff members should be trained and motivated to do spot checks of the VHW registers (comparing the registry information to the actual situation in the home); CS project staff could accompany to provide examples of how they type of cross checking can be done;

- The DPHO should encourage regular communication between is office and the Health PostIn-Charge about the VHWs' performance.

Nutrition/Growth Monitoring

o Regular growth monitoring of all children under five years of age is good, but better ways of identifying the malnourished ones and treating them can use less time and fewer resources. SC/US staff can judge the situation and advise local health staff accordingly. For example, on the basis of visual impression or on the complaint of a mother regrading illness in her child, a VHW or MCHW can act. He or she can use a Shakir tape (to measure arm circumference) and advise the mother on what food she should give, or whether the child needs to be referred to a Health Post. This may reduce the health staff's working time by a significant amount.

o Health education regarding nutrition is one of the most difficult and least productive jobs of a health worker. But once it is effective, it remains for a long time. There are good nutritious foods like corn, soya bean, wheat and rice available in the villages during some seasons. If such food is not readily available, a woman can exchange with her neighbor or in the market. What is needed on the part of the health staff is to educate mothers and encourage them:

- Not to waste food that they already have, for example selling milk and buying cigarettes; not using corn to produce alcohol;

- Using the food they have in a proper way (e.g., preparing sarbottam pitho and using it when convenient or as needed). It is not only nutritious but can decrease the incidence of disease, because

it does not putrify and remains clean for a long time.

o Worm infestation, frequent diarrhea, and ARI are the major causes of malnutrition in the target area. The scarcity of water in the locality is a also a big problem. Therefore appropriate preventive measures should be taken. Regular deworming campaigns are carried out in some areas with partial success. But as long as water contamination and poor sanitation exist, only deworming does not help. It is recommended that deworming be used only in problem children or on a mass scale if water purification and sanitary measures can be taken at the same time.

o Often during diarrhea and ARI, children have poor appetites and parents do not want to force the child to eat. This is the time when malnutrition sets in and a cycle of infection, diarrhea, ARI and malnutrition starts. Unless such children receive proper interventions in time, they gradually deteriorate to a severely malnourished state and nearly half of them die within six months. Health staff should educate mothers to give food, preferably with added calories to their children during and after diarrhea episodes and ARI. After diarrhea, mothers should be educated to give increased amounts of food to children, to maximize "catch up" growth. SC/US staff can monitor if health staff are carrying out such activities and if children are being given such food, and assist in the Health Post program accordingly.

o If appropriate ingredients are available in the area, demonstrations of nutritious food for children should be encouraged in the Health Posts and Outreach Clinics.

Vitamin A

o Messages on Vitamin A rich food can be delivered by VHWs, MCH workers, CHVs, and in the clinics.

o CHVs will promote attendance at the Vitamin A campaigns and will follow up on atttendance. If Vitamin A can be distributed outside the campaigns, those children who did not attend the campaign can receive Vitamin A from the CHV. Womens' groups will also deliver messages on Vitamin A, both emphasizing the importance of supplementing malnourished children.

o Change the objectives on Vitamin A. Eliminate the objective about lactating mothers. For the objective for 12-23 month old children, mention that this breakdown is only for reporting in the final survey, and that in fact all children from 6-59 months are targeted.

- Indicators of coverage should be:

  - Consider including Vitamin A on the VHW roster.

  - Compare campaign tallies to the numbers of children eligible from the VHW register.

- Train VHWs to treat xeropthalmia (night blindness, conjunctival xerosis, Bitot's spots, corneal xerosis) immediately on diagnosis of any of these conditions by administration of Vitamin A 200,000 IUs; administer 200,000 IUs the next day; and adminster another 200,000 IUs four weeks later. (For infants less than one year old or less than eight kg., give 100,000 IUs at each of these three times.)

Project Assessment

The evaluation team felt that the project should consider a systematic approach to assessing the effectiveness of ongoing activities and at the termination of the three years of the project. Based on the (revised) objectives set by the project, the indicators presented in the following table are recommended. The indicators derive from service statistics, community based information, and the final survey.

Table 10. Suggested Format for Project Assessment

CS Project Objectives	Baseline Data	Suggested Indicators
EPI	11% of children 12-23 months had complete coverage. 18% of women had 2 doses of TT.	Baseline and Final Survey. Community wide coverage as calculated from proportion of children immunized in VHW register and/or EPI roster.
Diarrhea	None of the mothers said they should give more to drink during diarrhea. 25% reported giving JVJ at last diarrhea.	Baseline and Final Survey
Nutrition	30% children less than months do not receive protein rich food.	Baseline and Final Survey
Prenatal/ Delivery	10% of women had an antenatal checkup. 69% of mothers eat less during pregnancy.	Baseline and Final Survey. Compare Clinic register to VHW register.
Vitamin A	Asked in Baseline Survey but response negligible.*	VHW roster (if noted) and calculation of proportion of children given 1 or more doses. Compare tallies to # of children eligible.
ARI	Not asked in Baseline.	Final Survey
Literacy	29% CHVs literate. 1 of 57 trained TBAs literate.	Baseline, CHV Survey and Final Survey.

Family Planning	11% eligible couples were using temporary or permanent contraception (10% used permanent methods; 1% temporary methods)	Baseline and Final Survey. VHW register of current use.

* At the time of the Baseline Survey, the MOH had not yet introduced Vitamin A capsule distribution into the national program.

Proposed Revised Project Objectives

The evaluation team reviewed the curent project objectives and felt that some were inappropriate or unrealistic, given the project's strategy to work through the government as the source of service provision. Very few of the stated objectives were ones over which the project actually had control. The original project objectives (as of May 1992) are given below, as well as the proposed revisions.

CHILD SURVIVAL VII

Project Objectives

Immunization:

Revised

- o 60% children 12-23 months will be completely immunized with BCG, polio, DPT, measles.
- o 50% of women 15-44 will have at least 2 doses of TT.

Original

- o 60% children 12-23 months will be completely immunized with BCG, polio, DPT, measles.
- o 50% of women 15-45 will have 2 doses of TT.

Diarrhea:

Revised

- o 90% of mothers will have access to ORS packets.
- o 40% of families with children < 2 years will know how to prepare and administer Jeval Jal correctly.
- o 40% of children < 2 years with diarrhea will be treated with JVJ and receive more fluid and foods during and after diarrhea episodes.

Original

- 60% of families with children < 2 will know how to prepare and administer Jeval Jal correctly.
- 40% of children < 2 with diarrhea will be treated with JVJ and receive more fluid and foods during and after diarrhea episodes.
- 50% of mothers with children < 2 will correctly name three causes of diarrhea.

Nutrition:

Revised

- 25% of mothers of children < 2 years will give appropriate supplementary foods (e.g., cereals, fruit, vegetables).
- 20% of mothers will give appropriate supplementary food to children, beginning at 6-7 months.

Original

- 40% of mothers of children < 2 will give appropriate weaning foods.

Prenatal/Delivery:

Revised

- 25% of women will know they should eat more during pregnancy.
- 40% of pregnant women will have an antenatal checkup.
- 40% of mothers of children < 2 years will know the three cleans for safe delivery.
- 33% fo TBAs will be trained in safe delivery practices.

Original

- 25% of women will eat more during pregnancy.
- 30% of pregnant women will have an antenatal checkup.
- 40% of mothers of children < 2 years will know the three cleans for safe delivery.

Vitamin A:

Revised

- 80% of children 12-23 months will have received at least 2 doses of Vitamin A.

Original

- 60% of children 12-23 months will have received 2 doses of Vitamin A.
- 60% of lactating mothers of children 0-12 months will have received one dose of Vitamin A.

ARI:

Revised

- 25% of mothers of children < 2 years will know the signs of ARI and seek advice or treatment from health workers.
- 90% of mothers will know where treatment for cough and cold is available.

Original

- 25% of mothers of children < 2 years will seek advice or treatment from health workers when the child has difficult breathing.

Family Planning:

Revised

- 25% of eligible couples will use temporary or permanent methods of contraception.

Original

- 20% of eligible couples will use temporary or permanent methods of contraception.

Nonformal Education:

Revised

- o 70% of CHVs and 15% of trained TBAs will have basic literacy skills.

Original

- o 80% of CHVs and 50% of trained TBAs and mothers' groups members will have basic literacy skills.
- o The MOH will have designed and adopted a plan to sustain those aspects of service delivery and quality of care developed in Siraha district.

Other Objectives:

Revised

- o 60% of VHWs' registers will be up to date.
- o A improved system of supervision will be established and implemented for:
  - DPHO to the Health Post
  - Health Post to the VHWs
  - VHWs to the CHVs

APPENDICES

Suggested Impact Indicators for Final Evaluation

Indicator	SC/US Areas	Non SC/US Areas
1. # CHVs active		
2. # VHWs active		
3. Village feedback on VHWs		
4. Regular MCH/ORC held		
5. Service statistics recording		
6. Service statistics reporting (timely, accurate)		
7. VHW register filled out		
8. Health Post Activities:		
- opens on time		
- staff in attendance		
- drugs available		
- ORS ordered on time		
- # deliveries by ANMs		
9. HP staff knowledge levels on:		
- ARI case management		
- ORS preparation		
- diarrhea case management		
10. Coverage:		
- Family planning		
- EPI		
- Antenatal care		

Appendix 2

Schedule for the Evaluation Team

Kathmandu

Thursday, 25 March 1993	SCF Project Staff Dr. Sabitri Pahari, Chief Public Health Div., MOH
Friday, 26 March 1993	Dr. Robin Biellik, WHO Advisor, EPI Division Dr. Kokila Vaidya, Chief, EPI Division, MOH Ms. Molly Gingerich, USAID Dr. Chautat, previous Regional Director, Eastern Region, Chief, Curative & Preventive Services, MOH
Saturday, 27 March 1993	Travel to Siraha

Siraha

Sunday, 28 March 1993	Golbazar Health Post Mahanaur Outreach Clinic NFE Center, Medinipur
Monday, 29 March 1993	SCF Staff, Siraha Dr. Adhikari, Lahan Hospital Dr. Hennig, Lahan Eye Hospital
Tuesday, 30 March 1993	VHW Visit, Lalpur Village Mr. Ram Chandra Singh, DPHO Mr. Rajendra Yadav, EPI Supervisor, DPHO Office Siraha District Hospital Jamdah Women's Group Sukhipur Health Post
Wednesday, 31 March 1993	Nainpur Health Post Outreach Clinic, Mohanpur EPI Sites: Chandra Udayapur, Lalvitya, Chandralalpur Nainpur Health Post Management Committee
Thursday, 1 April 1993	TBA Meeting, Asanpur

	CHV Meeting, Asanpur
Friday, 2 April 1993	Travel to Kathmandu

Kathmandu

Saturday, 3 April 1993	Writing and Team meeting
Sunday, 4 April 1993	Writing
Monday, 5 April 1993	Writing and Team meeting
Tuesday, 6 April 1993	Writing and Team meeting
Wednesday, 7 April 1993	Evaluation Debriefing

Appendix 3

Guideline Questions for Interviews

...mation on Diarrhoea, ARI and Nutrition.

Category of interviewee. Mother/FCHV/VHW/HP staff/DPHO/SCF
Village:- Ward No: - VDC:-

Name of HP in that Area: -

Date of interview:-

Serial number of interview: -

1. DIARRHOEA:

a) Did you have a training on diarrhoea case management ?
No__________ Yes__________
By whom SCF Staff__________DPHO__________

b) Can you define diarrhoea ? No__________ Yes__________
a) Correct b) Wrong

c) Can you mention any three causes of diarrhoea ?
Yes__________ No__________

d) Do you know what is this (Show a J. J. packet) ?
Can identify __________ Cannot identify__________

e) Do you know how to prepare it ?
No __________ Yes__________
Correct__________ Wrong __________

f) Should breast feeding be given during diarrhoea ?
No__________ Yes __________ a) The same__________
Frequency b) Less c) More

g) Should food be given during diarrhoea ? No __________
Yes__________a) As usual __________ b) Special, name__________
c) Anything else, name__________

h) Is there any change in the amount of fluid you give to a child during diarrhoea ?

a) The child will take as much as he likes .

b) It should be completely withdrawn.

i) What are some sign of dehydration ?
Satisfactory __________ Unsatisfactory __________

j) What sort of fluid is encouraged to be given ?
Name: 1 .
2.
3.

k) When children with diarrhoea can be treated at home ?
Correct_____ Wrong_____

l) When should a child be taken to a Hospital or a Health Post ?
1. Has sever diarrhoea.
2. Intractable vomiting.
3. Does not any fluid.
4. Condition lookdeteriorating.

m) Do you give any other drug to a child ? No_____
If Yes:

	What drug	For what reason
1.		
2.		
3.		
4.		

ARI

a) Have you taken a training on ARI ?
No_____ Yes_____
By whom SCF Staff_____ DPHO Staff_____

b) Can you describe some home remedies in ARI ?
No_____ Yes_____

c) What do you do /advise to give as home remedy to child suffering from ARI ?
Satisfactory_____ Unsatisfactory _____

d) What are some important signs when a child should be taken to a health worker/ health post ?
1. 2.

3. 4.

e) When should a child suffering from ARIbe referred for admission into a hospital ?
1. 2.

3. 4.

f) How do you treat a child suffering from

-Pneumonia.

-Severe Pneumonia.

-Very sever Diseases.

g) Do you have any health education programme on ARI for mothers ? What HE materials exist ? How effectively they are used ?

h) Arrangement /availability of drugs for ARI cases
- at HP,
- with VHWs,
- at the Community Level

i) What do you do when your child suffers from cough/cold ?

j) When do you know that he is suffering from pneumonia ?

k). Describe what is done to a child during ARI to

- Breast feeding

- Fluid intake

- Food intake

NUTRITION:

a) What are local weaning foods ?
1.
2.
3.

b Describe how they are prepared ?
Satisfactory _____ Unsatisfactory_____

c) Training on

Nutrition	Mothers group	FCHV	VHW	AHW/ANM	HPI /C
1. No. of sessions held					
2. No. of participants trained					
3. Refresher trainings to					
4. Distributed weighing scales to VHWs					

5. VAC distribution by
How many.....
During Period.....
Record of such children well kept _____ Not kept _____

6. Iron tablet distribution to mothers by
HPs..... During Period:.....
VHWs.....
Others.....

Description:	Achievements Mothers	FCHVs	VHWs	AHW/ANM	HPI/C
Training on diarrhoea management					
a) No.of sessions					
b) No.of trained					
Know about J.J.					
Know where available.					
Know how to prepare it.					
Know about HRS.					
Know how to prevent D.					
Know how to prepare it.					
Training of ARI cases management					
a) No.of sessions held.					
b) No.of participants trained.					
c) Know home remedy.					
d) Know, when to refer to a HW or HP.					
e) Know where to refer to a hospital.					
f) Know correct dose of an antibiotic.					

No.of diarrhoea cases treated during..... to.....

	0-11	12-23 months	24+	Total
at HP				
By VHWs				
By FCHVs				

No.of cases died:-

No.of ARI cases treated

	0-11	Total
at HP		
By VHWs		
By FCHVs		

No.of case died:-

Target (September 22, 1994) and Achievements (March 31, 1995)

Families/ Mothers of < 2 Children.	Target	Achievement
1. Prepare and administrate J.J. correctly.	60%	
2. Under 2 children with diarrhoea treated with JJ	40%	
3. Receive more fluid and food	40%	
4. Correctly name 3 causes of diarrhoea	50% mothers	
5. Estimated beneficiary population for CDD		Actually Services provided to:
0-11 months	3170	
12-23 months	2831	
6. ORT corner in HPs	2	
7. ORCs in VDC	14	
8. Appropriate weaning food given by mothers.	40%	
9. Eat more during pregnancy	25%	
10. Beneficiary population		
0-1 months	40% -1268	
12-23 months	40% -1132	
Mother of children <2 Yrs	25% -1600	
11. Children < 2 will have received 2 doses of Vit. 'A'	1700	
12. Mother of children (0-12 months) will have received 1 dose of Vitamin 'A'	60%	

Appendix 4

Evaluation Focus

1. Focus on "What's Worth Knowing" - there are more interesting things to examine than time to examine them, so we need to focus on a few topics, and do those well. (The Project's stated objectives are a good place to start).

2. We need to focus on **what actually happened**, and not what people think happened or wanted to happen.

3. The evaluation is part of the process of an ongoing activity, and as such we want to ensure that our contributions are helpful to this ongoing implementation of the project.

4. The varied skills and backgrounds of the team members are a real strength - we want to make sure that we draw upon all these and allow enough time for team interaction.

5. The stated AID Objectives of the Evaluation are to:

o Provide project staff with an external prespective on progress since the start of the project, and potential for reaching stated objectives.

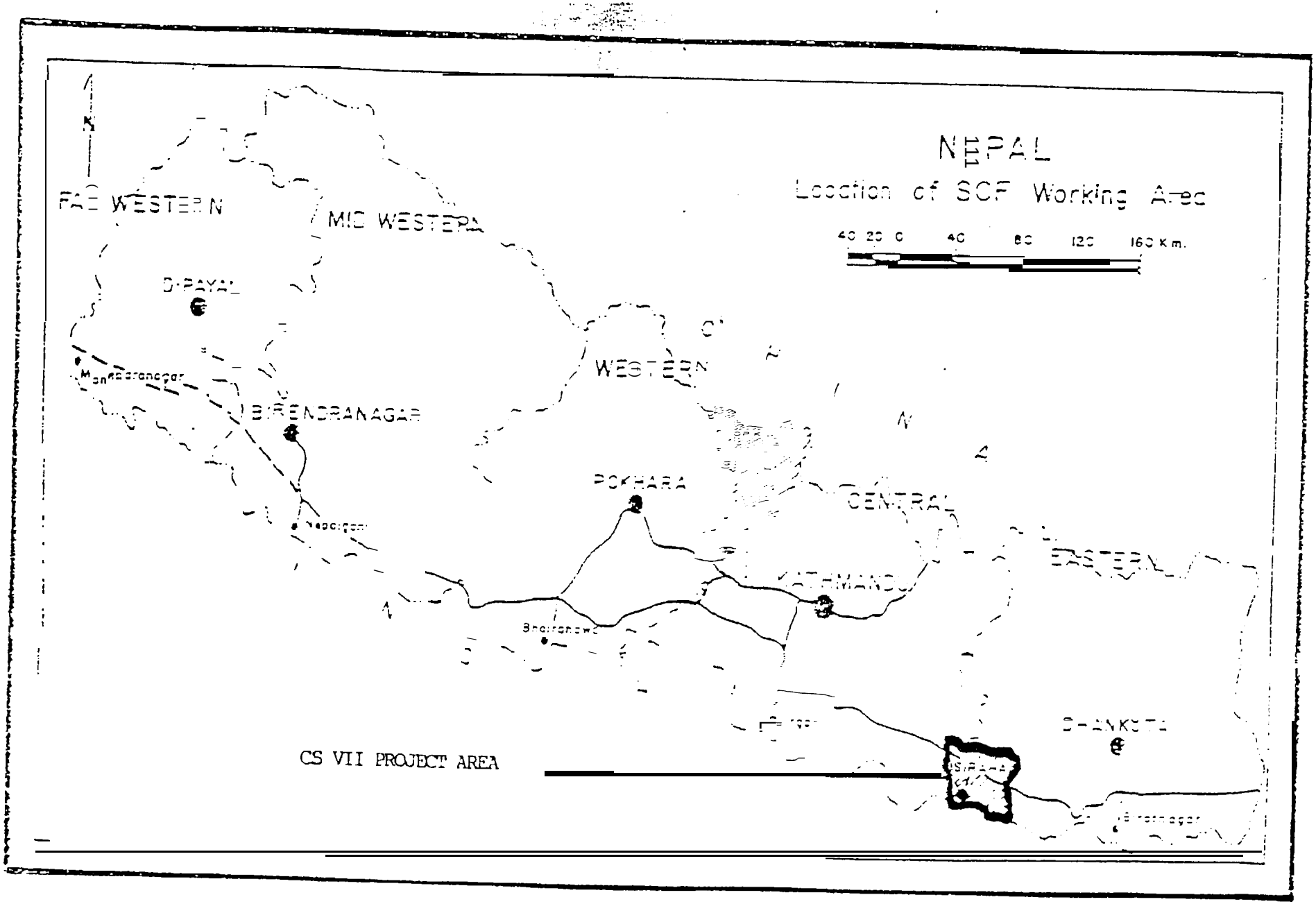
o Assess whether the project is being carried out in a competent manner, and priorities clearly defined.

o Help the PVO assess lessons learned, and identify new strategies or methodologies applicable to othe CS projects.

Appendix 5

Guideline Questions for Kathmandu Interviews

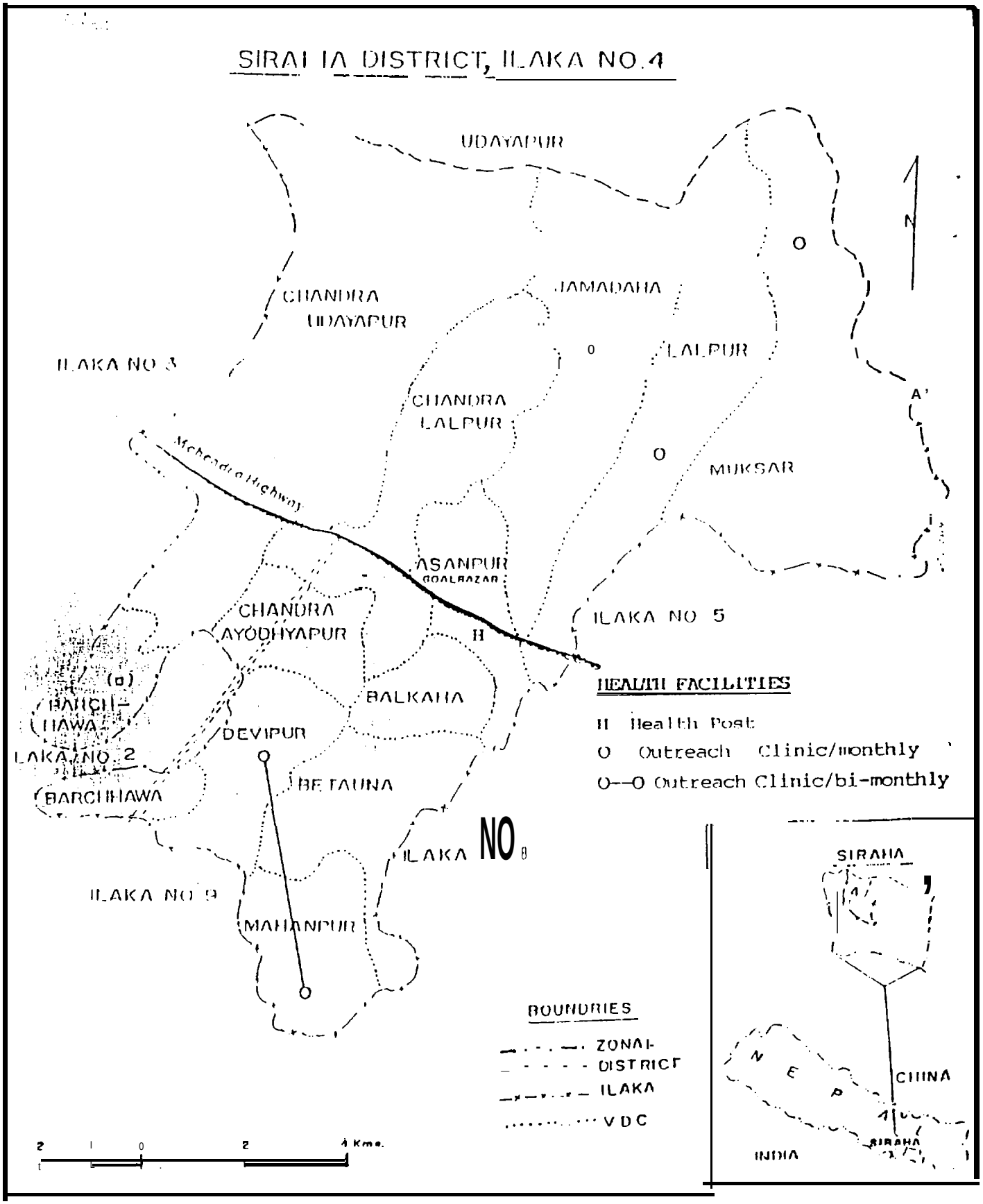
- What is the setting/context in which the Project was designed and is being implemented?
- How does it fit with respect to MOH national policy?
- How is the project expected to support or integrate with the MOH services?
- How does HMG see the role of an NGO in health services?
- Is this viewed as a potential model?
- What are the technical concerns/issues with regard to the project (e.g., Vitamin A)
- What is the government's regional/district focus and how does the STC activity fit in?
- What is the donor point of view?


NEPAL
Location of SCF Working Area
40 20 0 40 80 120 160 Km.
FAR WESTERN
MID WESTERN
WESTERN
CENTRAL
EASTERN
DIPAYAL
BIRENDRANAGAR
POKHARA
KATHMANDU
DHANKUTA
CS VII PROJECT AREA

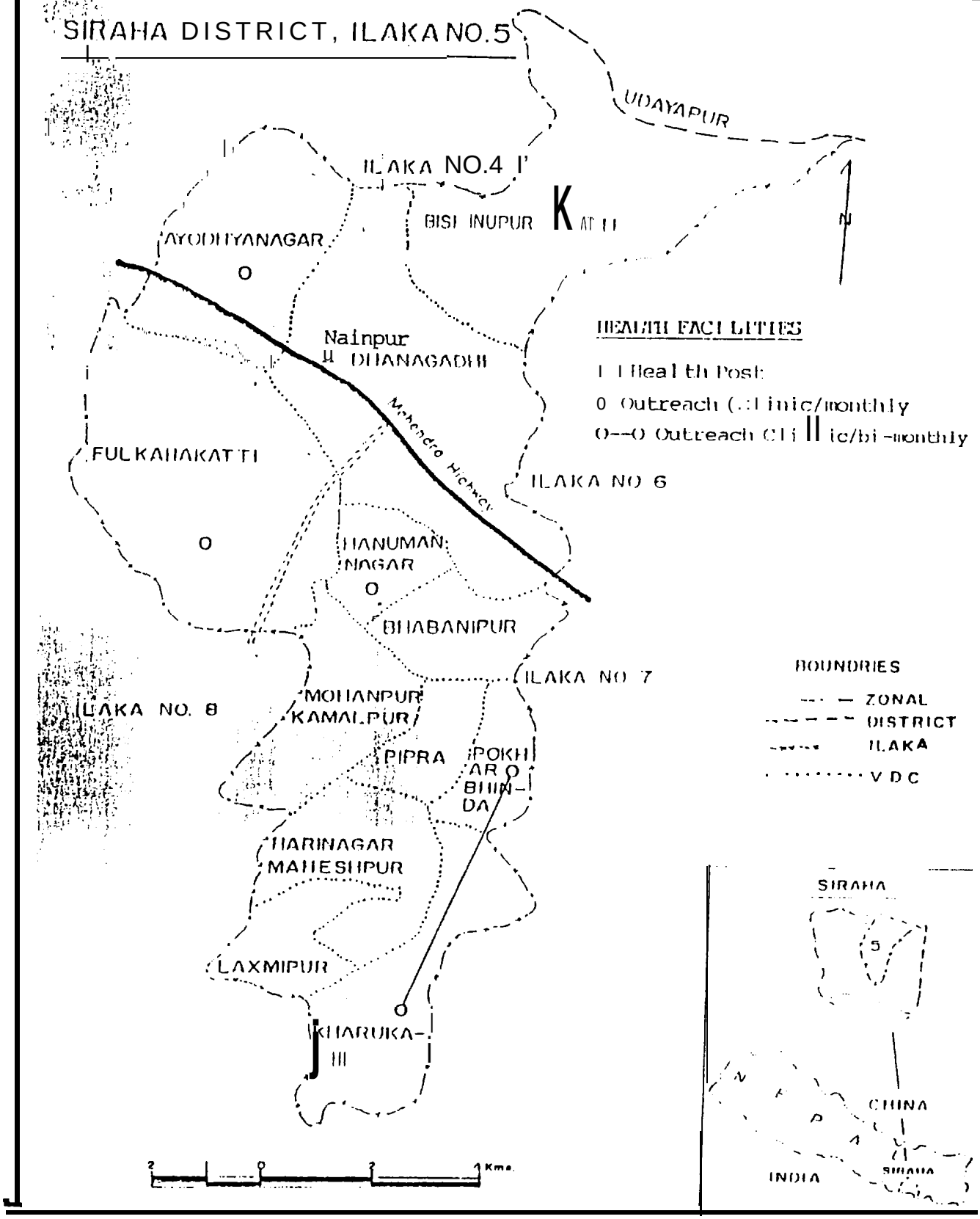
HEALTH FACILITIES

\+ Hospi tal

11 Health Post


SIRAHA DISTRICT, ILAKA NO.4
UDAYAPUR
CHANDRA UDAYAPUR
ILAKA NO 3
JAMADAHA
LALPUR
CHANDRA LALPUR
MUKSAR
A
A'
N
Mahendra Highway
ASANPUR
GOALBAZAR
CHANDRA AYODHYAPUR
ILAKA NO 5
BALKAHA
BARCHI-HAWA
DEVIPUR
ILAKA NO 2
BARCHHAWA
BELAUNA
ILAKA NO 8
ILAKA NO 9
MAHANPUR
HEALTH FACILITIES
H Health Post
O Outreach Clinic/monthly
O--O Outreach Clinic/bi-monthly
BOUNDRIES
ZONAL
DISTRICT
ILAKA
VDC
2 1 0 2 4 Kms.
SIRAHA
CHINA
INDIA
NEPAL

SIRAHA DISTRICT, ILAKA NO.5



COOPERATIVEAGREEMENTPDC-0500-G-00-1077 CHILD SURVIVAL VII NEPAL 12-Aug-93

BUDGETVS ACTUALS FOR YEAR 2 AND TOTAL EXPENSES TO DATE VS. TOTAL GRANT *

'ION: 6200 NEPAL

Procurement	YEAR 1 EXPENSES	YEAR 2 EXPENSES VS PLANNED BUDGET • EXPENSES 05/31/93	PLANNED BUDGET*+	BALANCE	% SPENT	PLANNED BUDGET YEAR 3	LIFE OF GRANT CUMULATIVE EXPENSES VS. TOTAL GRANT CUMULATIVE ACTUALS	TOTAL PLANNED BUDGET	BALANCE	% SPENT
Supplies**'	11,444 55	5,250 89	17,455 45	12,204 56	30 1%	8.750 00	16695.44	37,650.00	20,954 56	44.3%
Consultants	9,552 89	8.284.53	11.397.1 I	3.11258	72 7%	7.873 00	17.837.42	28.823.00	10.989 58	81.9%
Sub-Total:	20.997.44	13.535 42	28,852 56	15.317.14	46 9%	16.623 00	34,532 86	66.473 00	31.940 14	52.0%
Evaluation	713 19	1,559 70	5,536 81	3.977.1 1	28 2%	4.250.00	2.272.89	10,500.00	8.227.1 1	21 6%
Other Progrnm Costs										
Salaries	33,285 31	24.454 26	38.177 69	13,723 43	64 1%	39,128.00	57,739 57	110,591 00	52.851 43	52.2%
Fringe	8.915 36	7,245 80	13.312 64	6,066 84	54 4%	12,265.00	16.161.16	34.493.00	18.331.84	469%
Travel	19.81273	5,156 21	34,252 27	29,096 06	15 1%	30,000.00	24,968 94	84.085 00	59.098.08	29.7%
Other	4,043 28	4.245.14	16.156.72	11.911.58	26 3%	14.650.00	9,088 42	35.650 00	26.561 58	25.5%
Sub- Total:	66,856 68	41.101 41	101 ,899.32	60,797.91	40 3%	96,043.00	107,958 09	264,799 00	156.840 91	40 8%
TOTAL	88.567.31	56,196 53	136.288.69	80,092 16	412%	116.91600	144.763.84	341.772.W	197,008.16	42.4%

• Final Field Office, Home Office and Overhead through : 3/3 I/93
** Budget per DIP
*** Supplies ere individually under $500 per item

Year 1 = August 27.1991 - September 30,1992
Year 2 = October 1.1992 - September 30.1993.
Year 3 = October 1,1993 - September 29.1994

Appendix 7

'ION 0750 HO

BUDGET VS. ACTUALS FOR YEAR 2 AND TOTAL EXPENSES TO DATE VS. TOTAL GRANT

	EXPENSES YEAR 1	EXPENSES 05/31/93	PLANNED BUDGET YEAR 2	BALANCE	% SPENT	PLANNED BUDGET YEAR 3	LIFE OF GRANT CUMULATIVE EXPENSES VS. TOTAL GRANT: CUMULATIVE ACTUALS	TOTAL GRANT	BALANCE	% SPENT
Headquarters										
Salaries	8.540.79	6.125.56	16.753.21	*10.627.65*	36.6%	13.793.00	14.666 35	39,087.00	24,420.65	37.5%
Fringe	1.281.12	1.487.88	5.294.88	3.807.00	28 1%	3.586.00	2,769 00	10.162.00	7,393 00	27 2%
Travel	996.27	1,965.08	15.488 73	13.523 65	127%	9,494 00	2.961 35	25,979 00	23.017.65	1 t .4%
Other Direct Costs	50.55	177.83	3.079 45	2.901 62	5 8%	1,810 00	228.38	4.940.00	4.711 62	4.6%
Subtotal Headquarters:	10.868.73	9.756.35	40.616.27	30,859 92	24 .0%	28,683 00	20.625 08	80.168.00	59,542 92	25.7%
Nepal	88.56731	58.196.53	136,288 69	80.092 16	41.2%	116,916 00	144,763 64	341.772.00	197.008.16	42.4%
Total Direct Costs:	99.436.04	65,952 88	178.904 96	IIO.952 06	37 3%	145.599 00	165,388.92	421,940 00	256,551 08	39.2%
Indirect Costs	18395.66	12.158.64	34.111.34	21.952 70	35 6%	25,553 00	30,554 30	7e.060.00	47,505 70	39.1%
TOTAL COSTS	117.831.70	76.111.52	211,016.30	132,904 78	37 0%'	171,152.00	195,943 22	500.000 00	304,058 78	39.2%

• Final Field Office. Home Office and Overhead Overhead through 3131193
** Budget per DIP
• ** Supplies are individually under $500 pet item

Year 1 = August 27, 1991 - September 30. 1992.

Year 2 = October 1, 1992 - September 30. 1993

Year 3 = October 1, 1993 - September 29, 1994.

Appendix 8

Materials Reviewed During t-he CS VII Evaluation

1. SC/Nepal Fie1.d Office. CS VII Project First Annual Report, October 1, 1991 to September 30, 1992.

2. SC/US CS VII Project. Report on the Baseline Survey, Siraha District. May 1992.

3. SC/US. Siraha Dis'trict Baseline Survey (Muksar, Lalpur, Jamdaha, Phulkahakatti, Hanumannagar, Ayodhyanagar). April 1990.

4. Hirschhorn, Norbert.. Report to SC/US Nepal and Bangladesh Field Offices on Sustainability of Their Health and Development Programs. December 1992.

5. SC/US. Report on CHV and Mothers' Groups Literacy Survey. August, 1992.

6. USATD. USAID 1992 Health and Child Survival Project Questionnaire. September 1992.

7. Technical Review of CS VTJ Det-ailed Tmplementation Plan, SC/Nepal.

8. Biellik, Robin. Trip Report: Visit to Gorkha District, Nepal. 17-24 March 1992.

9. Hirschhorn. Norbert:. Lessons Learned Tn the Course of a Three Year Project CS V Urban health Program in Jakarta, Indonesia, Implemented by SC/US. August 1992.

10. SC/US CS VII Project Quarterly Reports: Oct. -Dec. 1992, July-Sept. 1992. April-June 1992, Jan.-March 1992, Oct.-Dec. 1991.

11. SC/US Nepal Office. Impact. of SC/US Nonformal Adult Education Program on Mother and Child Care. September 1992.

12. Shrestha, B.D. SC/US Health Coordination Meeting Report. August, 1992.

13. SC/US. Detailed Implementation Plan, CS VII Project, Siraha District. June 1992.

14. SC/US. Health Program Planning Guidelines. July 1992.

15. Brown, Lori DiPrete, et. al. "Quality Assurance of Health Care in Developing Countries", Quality Assurance Project (Applied Research in Child Survival Services). Center for Human Services, Bethesda, Md.